"MAUNA KEA– KA PIKO KAULANA O KA 'ĀINA"

(MAUNA KEA-THE FAMOUS SUMMIT OF THE LAND)

A Collection of Native Traditions, Historical Accounts, and Oral History Interviews for: Mauna Kea, the Lands of Ka'ohe, Humu'ula and the 'Āina Mauna on the Island of Hawai'i

Ву
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Cover Photos

Portion of HTS Plat Map 701, depicting Mauna Kea and the 'Āina Mauna.

No. 511. Kohatek (20 min 1-20-74). Courtesy of UH-Intitute for Astronomy.

Aerial View, Summit of Mauna Kea (1939). Photo No. 37382 A.C., in Collection of National Archives and Records Administration.

KPA-931. The Kalai'eha-Waiau Trail, through Keanakāko'i.

KPA-3746. Altar at Keanakākoʻi, Mauna Kea.

KPA-4224. Na'ena'e (Raillardia) of Ka-houpo-a-Kāne, Mauna Kea.

KPA-2567. Mauna Kea in the Morning, View from the Waiākea-Pi'ihonua uplands to the Summit.

KPA-3733. Ka-wai-hū-a-Kāne and Waiau, Mauna Kea.

KPA-S076. Mauna Kea viewed from the Mauna Loa Shrine on Pu'u Alaula.

Cowboys atop Summit of Mauna Kea, 1938. Courtesy of Rally Greenwell.

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EXECUTIVE SUMMARY

At the request of Stephanie Nagata, on behalf of the University of Hawai'i-Office of Mauna Kea Management, *Kumu Pono Associates LLC* undertook research, compiled a detailed collection of archival-historical records, and conducted oral history interviews with *kūpuna* and elder *kama'āina*, pertaining to the *ahupua'a* (native land divisions) of Ka'ohe, Humu'ula and neighboring *'āina mauna* (mountain lands) of Mauna Kea, on the island of Hawai'i. This work was undertaken as a part of ongoing archival and oral historical research conducted by *Kumu Pono Associates LLC*, since 1996, and builds upon the accounts published by Maly in 1997, 1999, 2002, and 2003. The study is multifaceted, and includes detailed verbatim accounts and descriptions of Mauna Kea, the larger Humu'ula-Ka'ohe lands, and *'āina mauna*, covering the periods of Hawaiian antiquity and traditions, to first-hand accounts of travel on and around Mauna Kea, dating from the early 1820s to the 1960s.

One of the primary goals of this study has been to bring a significant collection of historical resource material, describing—native Hawaiian traditions, traditional and customary practices and beliefs; early descriptions of the landscape, land use, and access; changes in the environment; efforts at conservation of the mountain landscape; and the events leading to development of observatories on Mauna Kea—into one manuscript. Such a manuscript will provide readers with access to the diverse, and at times, difficult to locate, historical narratives that document the cultural landscape, and history of land use on Mauna Kea. It being believed that this information may in turn serve as a platform for informed discussions—in the field of cultural and historical resources—in planning for the future well-being of Mauna Kea as a cultural, natural, and scientific resource.

Because of the nature of the Hawaiian system of beliefs and land management, this study looks not only at the upper regions of Mauna Kea, but also at the lands which lie upon the slopes of Mauna Kea. In the traditional and historical setting, the people living on the lands which rested upon, or even viewed Mauna Kea, shared ties to the upper mountain regions as well. The historical records—including oral testimonies of elder *kama'āina* of the mountain lands—provide readers with detailed descriptions of traditional and customary practices; the nature of land use, and the types of features found on the mountain landscape; and early efforts in conservation on Mauna Kea and the adjoining *'āina mauna*. The descriptions of land use and subsistence practices range from antiquity to the 1970s, and represent the knowledge of generations of life upon the land.

It is important to note that in the summit region of Mauna Kea (from approximately 11,000 feet and above) and on the lower mountain slopes are found several features named for, or associated with Hawaiian gods and deity. These associations are indicators of Mauna Kea's place in the culture and history of Hawaii as a scared landscape. With each part contributing to the integrity of the whole cultural, historical, and spiritual setting.

Through the collection of historical-archival texts and oral history interviews, we have found that a wide range of traditional knowledge and practices, including, but not limited to the following, are described for Mauna Kea and the adjoining 'āina mauna:

• **Mauna Kea**—though simply translated as "White Mountain" since at least 1823, the name, Mauna Kea is also known in native traditions and prayers as Mauna a Wākea (Kea), "The Mountain of Wākea." It is the first-born mountain son of Wākea and Papa, who were also progenitors of the Hawaiian race. Mauna Kea is symbolic of the *piko* (umbilical cord) of the island-child, Hawai'i, and that which connects the land to the heavens.

- **Pu'u o Kūkahau'ula**, named for a form of the god Kū, where the *piko* of new-born children were taken to insure long life and safety. This practice is still participated in at the present time.
- **Waiau**, named for the mountain goddess, Waiau (Ka piko o Waiau), and home of the *moʻo* (water-form) goddess Moʻo-i-nanea. Place where *piko* of newborn children were taken to ensure long life; and from which "ka wai kapu o Kāne" (the sacred water of Kāne) was collected. These practices are still participated in at the present time.
- Pu'u Poli'ahu" and Pu'u Lilinoe, named for, and the abode of goddesses of Mauna Kea.
- In 1823, the first missionary party to visit the summit of Mauna Kea learned from the natives that it was "the abode of the gods," and none could be induced to travel to the summit (Goodrich in Ellis, 1963:292).
- Heiau and 'ahu—ceremonial sites, shrines, and places where mele (chants) and offerings were presented.
- 'Ahu—stone mounds as land markers.
- Ana and lua kā ko'i (caves and quarries from which stone was harvested for making tools).
- *Ilina* (burial features) extending from the summit to the lowlands. Specific mention is made in several important historical accounts—recorded by both native witnesses and non-Hawaiians—of the presence of burials in the *pu'u* and summit plateau of Mauna Kea. The remains of individuals who share ties to Mauna Kea are still taken to the various *pu'u* on Mauna Kea for interment.
- Native trails—portions of which, on the ascent to the summit, and around the base of Mauna Kea, are overlaid by modern routes of access.
- Shelters and habitation caves.
- Resource collection sites.
- Later features, dating from the middle 1800s, including pens—such as *Kulaka*, on Humu'ula above Pu'u 'Ō'ō; and *Aiakala*, in Ka'ohe, above the Pu'u Nanahu section of the mountain—walls and fence lines.
- Stone and wooden houses.
- Water collection and storage facilities;
- Bird hunting blinds—in the form of single, double or tri-sided stone walls; former garden plots; and other ranch "support" features.

Another facet of this study, was a review of native lore associated with traditional knowledge of the heavens. While we have uncovered no specific archival references to native astronomy on Mauna Kea, the association of the gods and deities whose forms are seen in the heavens and whose names are commemorated at locations on Mauna Kea is significant. We have found, that as is the case in all areas of Hawaiian life, the traditions, customs and practices associated with the 'oihana kilokilo (astronomy) and kilo $h\bar{o}k\bar{u}$ (observing and discerning the nature of the stars) were deeply tied to the spiritual beliefs of the Hawaiian people. The stars are physical manifestations of the gods who created the heavens, earth, and humankind, or are body-forms granted to select individuals or beings of nature (Malo, 1951 and Beckwith, 1951). The combined writings of native and foreign historians on this subject—recorded between the 1830s to 1935—provide us with a list of more than 270 Hawaiian names for stars (not including alignments of stars which marked the heavens and pathways of traditional navigators).

The name Pu'u o Kūkahau'ula is the traditional name of the summit cluster of cones on Mauna Kea, appearing in native accounts and cartographic resources until ca. 1932. The recent names, Pu'u Wekiu, Pu'u Hau'oki and Pu'u Haukea, have, unfortunately been used since the 1960s (since the development of astronomy on Mauna Kea), and have displaced the significant spiritual and cultural values and sense of place associated with the traditional name, Pu'u o Kūkahau'ula.

The place name Poli'ahu, was recorded in native texts (cf. Kamakau, 1961 in this study), and as a part of Boundary Commission proceedings in 1873 (in this study); it was also widely documented as the name of the primary goddess of Mauna Kea. The specific usage of the place name "Puu Poliahu" (also referred to as Peak A), was apparently given to the present-day location in 1892, by W.D. Alexander, commemorating the goddess, Poli'ahu, (cf. Alexander and Preston, 1892-1893, in this study).

Also, of importance in discussions regarding modern astronomy on Mauna Kea, the narratives cited in this collection provide readers with first-hand accounts—from archival documents and oral history interviews—of the early days of astronomy on the mountain, including the thoughts and recommendations of the pioneer scientists, responsible agencies, and community members on the island of Hawai'i, in regards to use and limitations of Mauna Kea. An example of the kind of information recorded by the early scientists and community on the island of Hawai'i, between 1964 to 1980, was that development of telescope facilities on Mauna Kea should be carefully limited—by 1980, the recommended number being six observatories.

Historical Land Use on the Mountain Lands

As early as the 1820s, introduced cattle, sheep, goats, and wild dogs had made their way up to the mountain lands, and were bothersome to those who traveled the 'āina mauna. In 1834, Scottish naturalist, David Douglas was killed by a wild bullock at Keahua-ai (now called Douglas Pit or Kaluakauka), near the boundary of Humu'ula and Laupāhoehoe. By 1850, the natural-cultural landscape of the 'āina mauna was being significantly altered by the roving herds of wild bullocks, sheep and other ungulates, and ranching interests were being formalized in the region. In 1857, the Crown and Government mountain lands of Humu'ula and Ka'ohe—including the summit of Mauna Kea—were leased to Francis Spencer and the Waimea Grazing and Agricultural Company, which established ranching stations and operations around the mountain lands. Portions of the land of Pi'ihonua were leased to native bird hunters in the middle 1860s, and subsequently to native and foreign bullock hunters. As a result, Humu'ula and the larger 'āina mauna have been intensively ranched for more than 150 years.

Because hunting, and subsequently ranching of bullocks, cattle and sheep were the primary historic activities on the mountain lands, areas once forested soon became open pasture land. While the first formal lease of Humu'ula and Ka'ohe was issued in 1857 (Keoni Ana to F. Spencer), it was Samuel Parker and Parker Ranch that held the longest lease on the Humu'ula and Ka'ohe mountain lands. In between 1900 to 2002, their leases extended around Mauna Kea to the Pu'u Huluhulu vicinity, and for a period, the leases also included portions of the 'Āina Hou lands. The Parker Ranch interests initially focused on sheep ranching in the Humu'ula-Kalai'eha section, but in 1964, the ranch terminated it's sheep program. Cattle operations were maintained till the end of the Parker lease in August, 2002.

Today, limited ranching of cattle is continued on the lands extending from Humuʻula to Hānaipoe, Pāʻauhau, and the Parker Ranch lands—the Humuʻula section being worked under a permit by the Department of Hawaiian Home Lands, and leases from the State of Hawaiʻi. While the Humuʻula section is still partially grazed, some 6,000 acres between the Puʻu ʻŌʻō and Puʻuloa, have succumb to an infestation of the introduced gorse (first recorded on the land in 1892), which has had little maintenance since ca. 1980.

As early as 1831, portions of the land of Pi'ihonua Uka and neighboring forest lands were being worked by Daniel Castle, and later, by the Castle and Hitchcock brothers for lumber milling and bullock hunting operations. Subsequently by the 1860s, native lessees were granted the right of hunting in the Pi'ihonua uplands. Then in 1887, the *ahupua'a* of Pi'ihonua (everything from above Hilo Town to the upland boundary with Humu'ula) was leased to John Timoteo Baker, who undertook ranching operations in Pi'ihonua in the 1890s.

Prior to Baker's lease, the Puu Oo Ranch Station had been established, with its buildings developed as a part of the Humuula Sheep Station Company; this due to an error in locating the boundary between Humu'ula and Pi'ihonua. In 1896, the boundary matter was settled, and Baker maintained cattle and livestock ranching operations in the area. Baker sold his lease to W.H. Shipman in 1899, which was followed by the sale of a 40 acre parcel—the Pu'u Oo Ranch headquarters—in Patent Grant No. 8970, to W.H. Shipman. In 1902, Shipman secured leases on the lands of Pāpa'ikou, Makahanaloa and other Hilo District lands, which were incorporated into the Pu'u Oo ranching

operation. W.H. Shipman, Limited, sold its interest in the Pu'u 'Ō'ō parcel in the 1970s, and it remains in private ownership to the present day.

Early leases of the Ka'ohe mountain lands date back to 1857 (Keoni Ana to F. Spencer), and the operations of Francis Spencer's Waimea Grazing and Agricultural Company. The lease took in all of the mountain lands (to the summit of Mauna Kea), across Ka'ohe to its' Mauna Loa boundary. Activities were all tied to sheep and cattle ranching. Subsequently, in 1870, the lease was acquired by Parker Ranch, which held most of the Ka'ohe mountain lands until their removal in 1905 for the Mauna Kea Forest Reserve, and later withdrawals as a part of the Pōhakuloa Military installation in 1956 (Governor's Executive Order No. 1719; and Presidential Executive Order No. 1167). Portions of the land of Ka'ohe, generally those on the northern (Waimea) side of Mauna Kea, are still grazed by Parker Ranch. The land of Ka'ohe IV (the Pōhakuloa section), were turned over to the United States Army, and have been used for military training operations since that time.

The summit of Mauna Kea, situated in the *ahupua'a* of Ka'ohe, was noted as a site of importance for modern astronomical observations by the Pendulum Party of 1892. In 1964, the first modern observatory was built on top of Pu'u Poli'ahu. By 1965, the National Aeronautics and Space Administration (NASA) and the University of Hawaii initiated their program "to exploit the exciting potentialities of the Mauna Kea site for astronomical purposes" (cf. Newell to Hiatt, Feb. 16, 1965, in this study). In 1967, the University of Hawaii Institute for Astronomy was founded, and in 1968, the Board of Land and Natural Resources leased the entire summit of Mauna Kea to the University by Lease No. S-4191. While the practice and activities associated with astronomy on Mauna Kea represent the shortest of the periods of history and land use described in this study, its forty-one years (at the time of this writing) in the summit region of Mauna Kea, also represent the period of most significant changes in the natural and cultural landscapes on the mountain.

Archival Resources of the Present Study

Records cited—many as verbatim transcripts, allowing readers to understand the full context of the accounts as meant by the original authors—include native accounts translated from Hawaiian language sources; the records of Kingdom and Government agencies; journals of historic visitors; records of the lessees and ranching operations on the mountain lands; and narratives from scientific expeditions to Mauna Kea through the 1960s. There are also cited, a number of the early letters by participants in the development of astronomy on Mauna Kea, dating from 1963 to 1980.

Archival-historical resources were located in the collections of the Hawai'i State Archives, Survey Division, Land Management Division, and Bureau of Conveyances; the Bishop Museum Archives; the Hawaiian Historical Society; University of Hawai'i-Hilo Moʻokini Library; private family collections; the Parker Ranch & *Paniolo Preservation Society* (PPS) collections; the National Archives and Records Administration, and NOAA Central Library; the Houghton Library-Harvard; the USGS Central Library, Denver; the Hawaiian Historical Society; the Hawaiian Mission Children's Society Library; the Hilo Public Library; the Archives of the Institute for Astronomy; and in the collection of *Kumu Pono Associates LLC*. The oral history interviews cited in this study represent selected interviews conducted by Maly between 1999 to 2005, and reflect the recollections of elder native Hawaiians and *kamaʻāina* of lands of the *ʻāina mauna*. The interviewees ranged in age from their 60s to 90s, and in their stories they describe life upon the land, practices associated with travel and work on the mountain lands, and the early days of astronomy on Mauna Kea.

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INTRODUCTION

Background

At the request of Stephanie Nagata, on behalf of the Office of Mauna Kea Management, *Kumu Pono Associates LLC*¹ conducted research, compiled a detailed collection of archival-historical records, and conducted oral history interviews with *kūpuna* and elder *kamaʿāina*, pertaining to the *ahupuaʿa* (native land divisions) of Kaʻohe, Humuʻula and neighboring *ʿāina mauna* (mountain lands²) of Mauna Kea, on the island of Hawaiʿi (*Figure 1*). This work was undertaken as a part of on-going archival and oral historical research being conducted by *Kumu Pono Associates LLC*, since 1996, and builds upon detailed accounts published by Maly in 1997, 1999, 2002a & 2002b, and 2003. The study is multifaceted, and includes detailed verbatim accounts and descriptions of Mauna Kea, the larger Humuʻula-Kaʻohe lands, and *ʿāina mauna*, covering the period of Hawaiian traditions to first-hand accounts of travel on the *ʿāina mauna* and Mauna Kea, dating from the early 1820s, to the 1970s.

Through the detailed and extensive narratives, we seek to provide the University of Hawai'i; Native Hawaiians and other community members; planners; land and resource managers; and those interested in future plans and activities on Mauna Kea, and the larger 'āina mauna, with access to a significant collection of documentation pertaining to the traditional, cultural, historical and natural assets of Mauna Kea and the 'āina mauna. Many of the records reported herein, have not been previously known, or made available in their entirety. While future researchers will likely find more information, and be able to answer further questions about the traditions and history of Mauna Kea, we have sought to ensure that through this collection, readers and parties with responsibility for Mauna Kea, will have a solid foundation of traditional and historical knowledge to speak and work from.

Archival-Historical Research and Oral History Interviews

The archival-historical research conducted as a part of past studies and the present study, was performed in a manner consistent with Federal and State laws and guidelines for such studies. Among the pertinent laws and guidelines are the National Historic Preservation Act (NHPA) of 1966, as amended in 1992 (36 CFR Part 800); the Advisory Council on Historic Preservation's "Guidelines for Consideration of Traditional Cultural Values in Historic Preservation Review" (ACHP 1985); National Register Bulletin 38, "Guidelines for Evaluating and Documenting Traditional Cultural Properties" (Parker and King 1990); the Hawai'i State Historic Preservation Statue (Chapter 6E), which affords protection to historic sites, including traditional cultural properties of on-going cultural significance; the criteria, standards, and guidelines currently utilized by the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) for the evaluation and documentation of cultural sites (cf. Title 13, Sub-Title 13:275-8; 276:5 – 2003); and the November 1997 guidelines for cultural impact assessment studies, adopted by the Office of Environmental Quality Control (which also facilitate the standardized approach to compliance with Act 50 amending HRS Chapter 343; April 26, 2000).

Maly and Maly have conducted detailed research in archival-historical literature, referencing both native Hawaiian language and English texts; conducted field visits with elder *kama'āina*; and conducted oral history interviews with individuals known to be knowledgeable about the history, residency and land use on the 'āina mauna.

¹ Kepā Maly, Cultural Historian-Resource Specialist & Onaona Maly, Researcher.

The native term 'āina mauna, was used affectionately by elder Hawaiians, to describe all of the mountain lands surrounding, and including Mauna Kea. It is used in this text, in the same manner.

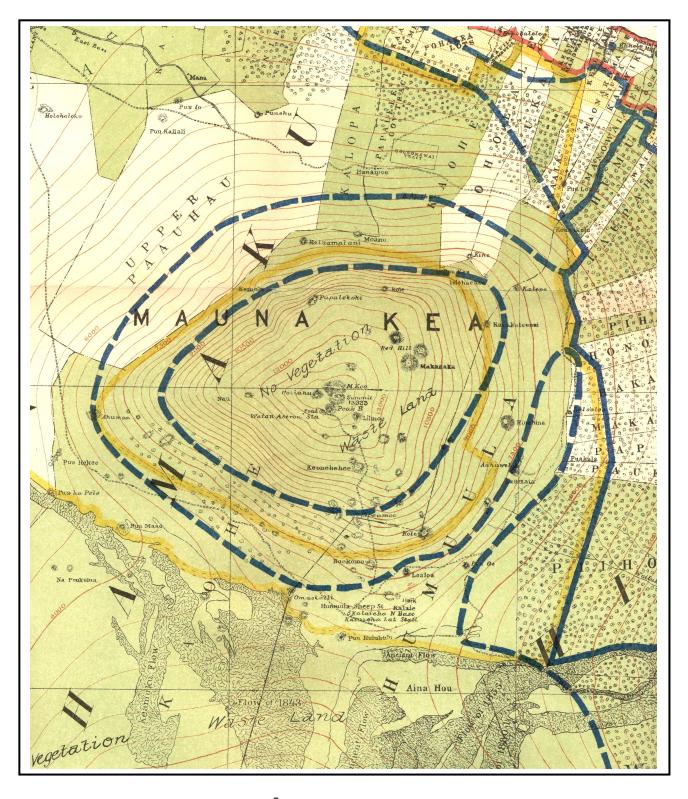


Figure 1. Mauna Kea and Neighboring 'Āina Mauna, on the Island of Hawai'i (Hawaiian Territorial Survey, 1901)

While conducting the research, primary references included, but were not limited to—land use records, including the Hawaiian Land Commission Awards (L.C.A.) records from the *Māhele 'Āina* (Land Division) of 1848; the Boundary Commission Testimonies and Survey records of the Kingdom and Territory of Hawai'i; and historical texts authored or compiled by—D. Malo (1951); S.N. Haleole (1862-1863); J.P. I'i (1959); Kupahu (1865); S. M. Kamakau (1961, 1964, 1976, and 1991); Wm. Ellis (1963); records of the American Board of Commissioners of Foreign Missions (A.B.C.F.M.) (1820-1860); Chas. Wilkes (1845); Alexander & Preston (1892-1894); A. Fornander (1916-1919 and 1996); Isabella Bird (1964); G. Bowser (1880); and many other native and foreign writers. The study also includes several native accounts from Hawaiian language newspapers (compiled and translated from Hawaiian to English, by Maly), and historical records authored by nineteenth century visitors, and residents of the region.

Archival-historical resources were located in the collections of the Hawai'i State Archives, Survey Division, Land Management Division, and Bureau of Conveyances; the Bishop Museum Library and Archives; the Hawaiian Historical Society and the Hawaiian Mission Children's Society Library; University of Hawai'i-Hilo Moʻokini Library; the National Archives and Records Administration (NARA), Maryland; the Library of Congress (LoC), Washington D.C.; the National Oceanic and Atmospheric Administration (NOAA) Library, Maryland; the Smithsonian Institution Natural History and National Anthropological Archives libraries, Washington D.C.; the Houghton Library at Harvard; the United States Geological Survey Library, Denver; the *Paniolo Preservation Society* (PPS) and Parker Ranch collections; private family collections; and in the collection of *Kumu Pono Associates LLC*. This information is generally cited in categories by chronological order of the period depicted in the narratives.

The oral history interviews cited in this study (Appendix A) represent selections from interviews conducted by Maly between 1998 to 2005, and reflect the recollections of elder native Hawaiians and *kama'āina* residents of the *'āina mauna*. The interviewees ranged in age from their 60s to 90s, and in their stories they describe life upon the land, and practices of their families, and changes observed over the years in the condition of the landscape.

The recorded interviews were transcribed and returned (with the recordings) to each of the interviewees. Follow up discussions were then conducted to review each of the typed draft-transcripts. The latter process resulted in the recording of additional narratives with several interviewees. Following completion of the interview process, all of the participants in the tape recorded oral history interviews gave their permission for inclusion of portions of their transcripts in historical studies of the 'āina mauna. Because of the review and follow-up discussions with interviewees, the final transcripts cited in this study at times differ from the original recorded interview. The final released transcripts supersede the original documentation.

The historical records—including oral testimonies of elder *kamaʻāina* of the mountain lands—provide readers with detailed descriptions of traditional and customary practices, the nature of land use, and the types of features to be expected on the landscape, and early efforts in conservation on Mauna Kea and the adjoining *ʻāina mauna*. The descriptions of land use and subsistence practices range from antiquity to the middle 1950s, and represent the knowledge of generations of life upon the land. Importantly, in the discussion regarding astronomy on Mauna Kea, the narratives cited in this collection also provide readers with first-hand accounts—in archival literature and oral history interviews—of the early days of astronomy on the mountain, including the thoughts and recommendations of the pioneer scientists and community members on the island of Hawaiʻi, in regards to use and limitations of Mauna Kea.

A CULTURAL-HISTORICAL OVERVIEW OF THE 'ĀINA MAUNA OF HAWAI'I

This section of the study provides readers with a general overview of the cultural and natural³ landscapes of Mauna Kea and the 'āina mauna. The narratives include discussions on Hawaiian settlement, population expansion, evolution of the traditional land management practices, and attachment to place. We find that the ancient Hawaiian system of land management is rooted in the beliefs, practices, traditions and values of the people, and that these formed the basis of the sustainable relationship shared between the Hawaiian people and the land. As this system evolved, the *ahupua'a* of Ka'ohe and Humu'ula were established as the largest lands of the Mauna Kea region. There are also some 75 additional *ahupua'a* in the Hilo District; 82 *ahupua'a* in the Hāmākua District; and one *ahupua'a* with several large 'ili divisions in the Kohala District, that rest upon the slopes of, and are enriched by the tangible and intangible resources of Mauna Kea. These traditional land divisions defined the rights of access of people to the resources necessary to life and culture; they were intricately tied to the lifeways of the people; and are reflected in the on-going cultural attachment⁴ of Hawaiians to Mauna Kea.

"Kumulipo" Traditions of the Heavens, Gods, Land, Natural Resources, and People in the Hawaiian Cultural System

In the Hawaiian world view, natural and cultural resources were treated alike, the well-being of one depended upon the well-being of the other. We find that native traditions describe the formation of the heavens, the islands, and all forms of life and nature, in the context of a genealogy, and the birth of children.

The epic "*Kumulipo*," a Hawaiian Creation Chant, was translated by Martha Warren Beckwith (1951). The "*pule*" (prayer) was given, in ca. 1700, at the dedication of the new-born chief, Ka-'Ī-i-mamao, also known as Lono-i-ka-Makahiki. Beckwith described the *pule* as:

The Hawaiian *Kumulipo* is a genealogical prayer chant linking the royal family to which it belonged not only to primary gods belonging to the whole people and worshiped in common with allied Polynesian groups, not only to deified chiefs born into the living world, the Ao, within the family line, but *to the stars in the heavens* and the plants and animals useful to life on earth, who must also be named within the chain of birth and their representatives in the spirit world thus be brought into the service of their children who live to carry on the line in the world of mankind... [Beckwith 1951:8]

Beckwith's primary resources for the *Kumulipo*, came from the papers of King David Kalākaua, his sister, Queen Lili'uokalani, who published the Kumulipo in 1897; and papers of Prince Jonah Kūhiō Kalanaiana'ole.

In her introduction to the *Kumulipo*, Queen Lili'uokalani observed that the language was itself at times difficult to translate, "because the true signification has been lost." (Liliuokalani, 1897). Of Hawaiian

In the Hawaiian mind, cultural and natural landscapes are one and the same. It was the nature of place that shaped the cultural and spiritual view of the Hawaiian people.

[&]quot;Cultural Attachment" embodies the tangible and intangible values of a culture—how a people identify with, and personify the environment around them. It is the intimate relationship (developed over generations of experiences) that people of a particular culture feel for the sites, features, phenomena, and natural resources etc., that surround them—their sense of place. This attachment is deeply rooted in the beliefs, practices, cultural evolution, and identity of a people. The significance of cultural attachment in a given culture is often overlooked by others whose beliefs and values evolved under a different set of circumstances (cf. James Kent, "Cultural Attachment: Assessment of Impacts to Living Culture." September, 1995).

practices of navigation, and knowledge of the and heavens, stars, and world around them, she also observed — "The ancient Hawaiians were astronomers, and the terms used appertained to the heavens, the stars, terrestrial science, and the gods." (Liliuokalani, 1897).

Ka-'Ī-i-mamao, also called Lono-i-ka-Makahiki, was the son of Keawe-i-kekahi-ali'i-o-ka-moku and Lono-ma-'Ī-kanaka. She noted that the Kumulipo was:

"A prayer of dedication of a chief, A *Kumulipo* for Ka-'l-amamao and (passed on by him) to Alapai'i-wahine (woman)..." "An ancient prayer for the dedication of the high chief Lono-i-ka-makahiki to the gods soon after his birth..." [Beckwith 1951:8]

This chant of Kumulipo is the chant recited by Pu'ou to Lono (Captain Cook) as he stood while a sacrifice of pork was offered to him at the *heiau* of Hikiau at Kealakekua.

The priest had said at the time of Ka-'l-'i-mamao's death that Lono would come again, that is, Ka-'l-'i-mamao, and would return by sea on the canoes 'Auwa'alalua.

That was why Captain Cook was called Lono... [Beckwith 1951:10]

The following excerpts of the "He Pule Ho'ola'a Ali'i He Kumulipo, No Ka-'l-i-Mamao" (A Dedication Prayer for the Chief, the Kumulipo, for Ka-'l-i-Mamao) are among those that address the relationship between the stars of the heavens, the chiefly line, and earth. The entire Kumulipo, is comprised of more than 2,100 lines, with narratives describing every facet of life and nature known in the Hawaiian system:

Ka Wa Akahi

- 1. O ke au i kahuli wela ka honua
- 2. O ke au i kahuli lole ka lani
- 3. O ke au i kuka'iaka ka la.
- 4. E hoʻomalamalama i ka malama
- 5. O ke au o Makali'i ka po
- 6. O ka walewale hoʻokumu honua ia
- 7. O ke kumu o ka lipo, i lipo ai
- 8. O ke kumu o ka Po, i po ai
- 9. O ka lipolipo, o ka lipolipo
- 10. O ka lipo o ka la, o ka lipo o ka po
- 11. Po wale ho—'i
- 12. Hanau ka po
- 13. Hanau Kumulipo i ka po, he kane
- 14. Hanau Po'ele i ka po, he wahine... [page 187]

Ka Wa Umikumamaha 1846. Hanau o Paupaniakea 1847. O Wakea no ia, o Lehuʻula, o Makulukulukalani 1848. O ko laua hope, o kanaka ʻopeʻope nui 1849. Huihui a kau io Makaliʻi, pa—ʻa 1850. Paʻa na hoku kau i ka lewa The First Period

- 1. At the time when the earth became hot At the time when the heavens turned about At the time when the sun was darkened To cause the moon to shine
- 5. The time of the rise of the Pleiades
 The slime, this was the source of the earth
 The source of the darkness that made
 darkness

The source of the night that made night The intense darkness, the deep darkness 10. Darkness of the sun, darkness of the night

Nothing but night.
The night gave birth
Born was *Kumulipo* in the night, a male
Born was *Poʻele* in the night, a female...

[page 59]

The Fourteenth Period
Born was Pau-pani-a[wa]kea
This was Wakea; [born was] Lehu'ula;
[born was] Makulu-kulu-the-chief
Their youngest, a man of great bundles
Collected and placed with Makali'i; fixed fast
1850. Fixed are the stars suspended in
the sky

1851. Lewa Kaʻawela, lewa Kupoilaniua
1852. Lewa Haʻi aku, lewa Haʻi mai

1853. Lewa Kaha'i, lewa Kaha'iha'i

1854. Lewa Kaua, ka pu'uhoku Wahilaninui 1855. Lewa ka pua o ka lani, Kaulua-i-ha'imohai

1856. Lewa Puanene, ka hoku ha'i haku 1857. Lewa Nu'u, lewa Kaha'ilono

1858. Lewa Wainaku, lewa Ikapa'a.

1859. Lewa Kiki'ula, lewa Keho'oea 1860. Lewa Pouhanu'u. lewa Ka'ili'ula

1861. Lewa Kapakapaka, lewa Mananalo

1862. Lewa Kona, lewa Wailea

1863. Lewa ke Auhaku, lewa Ka-maka-Unulau

1864. Lewa Hinalani, lewa Keoea

1865. Lewa Ka'aka'a, lewa Polo'ula

1866. Lewa Kanikania'ula, lewa Kauamea 1867. Lewa Kalalani, lewa Kekepue

1868. Lewa Ka'alolo, lewa Kaulana-a-ka-la

1869. Lewa Hua, lewa 'Au'a

1870. Lewa Lena. lewa Lanikuhana

1871. Lewa Ho'oleia, lewa Makeaupe'a

1872. Lewa Kaniha'alilo, lewa 'U'u

1873. Lewa 'A'a. lewa 'Ololu

1874. Lewa Kamaio, lewa Kaulu[a]lena

1875. Lewa o Ihu-ku, lewa o Ihu-moa

1876. Lewa o Pipa, lewa Ho'eu

1877. Lewa Malana, lewa Kaka'e

1878. Lewa Mali'u, lewa Kaulua

1879. Lewa Lanakamalama, lewa Naua

1880. Lewa Welo. lewa Ikiiki

1881. Lewa Ka'aona, lewa Hinaia'ele'ele [page 235]

1882. Lewa Puanakau, lewa Le'ale'a

1883. Lewa Hikikauelia, lewa Ka'elo

[There] swings⁵ *Kaʻawela* [Mercury], swings *Kupoilaniua*

Ha'i swings that way, Ha'i swings this way Kaha'i swings, swings Kaha'iha'i [in the Milky Way]

Swings *Kaua*, the star cluster *Wahilaninui* 1855. Swings the flower of the heavens, *Kaulua-i-haʻimohaʻi*

Puanene swings, the star that reveals a lord *Nu'u* swings, *Kaha'ilono* swings

Mainaku Instrumetar of Hilal swi

Wainaku [patron star of Hilo] swings, swings Ikapa'a

Swings Kiki'ula, swings Keho'oea

1860. *Pouhanu'u* swings, swings *Ka-ili-'ula*, The-red-skinned

Swings *Kapakapaka*, [and the morning star] *Mananalo* [Jupiter or Venus]

Swings Kona, swings *Wailea* [patron star of Maui] [page 126]

Swings the *Auhaku*, swings the Eye-of-*Unulau*

Swings Hina-of-the-heavens, *Hina-lani*, swings *Keoea*

1865. *Kaʻakaʻa* swings, swings *Poloʻula* [star of Oahu]

Kanikania'ula swings, Kauamea swings Swings Kalalani [of Lanai], swings [the astrologers' star] Kekepue

Swings *Kaʻalolo* [of Niʻihau], swings the Resting-place-of-the-sun [*Kaulana-a-ka-la*]

Hua swings, 'Au'a [Betelgeuse] swings 1870. Lena swings, swings Lanikuhana Swings Ho'oleia, swings Makeaupe'a Swings Kaniha'alilo, swings 'U'u Swings Aa [Sirius], swings 'Ololu Kamaio swings, swings Kaulu[a]lena 1875. Swings Peaked-nose, swings Chicken-nose

Swings *Pipa*, swings *Hoʻeu*Swings *Malana*, swings *Kakaʻe*Swings *Maliʻu*, swings *Kaulua Lanakamalama* swings, *Naua* swings
1880. *Welo* swings, swings *Ikiiki Kaʻaona* swings, swings *Hinaiaʻeleʻele*

Puanakau [Rigel] swings, swings Le'ale'a Swings Hikikauelia [Sirius of navigators], swings Ka'elo

In this context, Beckwith uniformly translated the word "*lewa*" as "swings," which is one translation for the word; while others, depending on context might include, the sky, firmament, afloat, dangling, etc. We suggest, that a more poetic translation might be that "Afloat is *Kaʻawela*, afloat is *Kupoilaniua*…" and so on with each of the references to the named stars, which appear to float in the heavens (*lewa*).

1884. Lev	va Kapawa,	lewa Hikika	aulonomeha
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1885. Lewa Hoku'ula, lewa Poloahilani

1886. Lewa Ka'awela, lewa Hanakalanai

1887. Lewa Uliuli, Iewa Melemele

1888. Lewa Makali'i, lewa Na-huihui

1889. Lewa Kokoiki, lewa Humu

1890. Lewa Moha'i, lewa Kauluokaoka

1891. Lewa Kukui, lewa Konamaukuku

1892. Lewa Kamalie, lewa Kamalie-mua

1893. Lewa Kamalie-hope

1894. Lewa Hina-o-na-leilena

1895. Lewa na Hiku, lewa Hiku-kahi

1896. Lewa Hiku-alua, lewa Hiku-kolu

1897. Lewa Hiku-aha, lewa Hiku-lima

1898. Lewa Hiku-ono, lewa Hiku-pau

1899. Lewa Mahapili, lewa ka Huihui

1900. Lewa Na Kao

1901. Lu ka 'ano'ano Makali'i,

ʻanoʻano ka lani

1902. Lu ka 'ano'ano akua, he akua ka la

1903. Lu ka 'ano'ano a Hina, he walewale o Lonomuku [Beckwith, 1951:236]

Swings Kapawa, swings Hikikaulonomeha [Sirius of astrologers]

1885. Swings *Hokuʻula*, swings *Poloahilani* Swings *Kaʻawela*, swings *Hanakalanai*

Uliuli swings, Melemele swings [two lands of old]

Swings the Pleiades, *Makali'i*, swings the Cluster. *na Huihui*

Swings *Kokoiki* [Kamehameha's star], swings *Humu* [Altair]

1890. *Mohaʻi* swings, swings *Kaulu[a]okaoka*

Kukui swings, swings Konamaukuku

Swings Kamalie, swings Kamalie the first

Swings Kamalie the last

Swings Hina-of-the-yellow-skies, *Hina-o-na-Leilena*.

1895. Swing the Seven, na Hiku.

[Big Dipper], swings the first of the Seven

The second of the Seven, the third of the Seven

The fourth of the Seven, the fifth of the Seven

The sixth of the Seven, the last of the Seven Swings *Mahapili*, swings the Cluster

[page 127]

1900. Swing the Darts [*Kao*] of Orion Sown was the seed of *Makali'i*, seed of the heavens

Sown was the seed of the gods, the sun is a god

Sown was the seed of Hina, an afterbirth of Lono-muku... [Beckwith, 1951:128]

In the *Kumulipo*, and other *mele* of creation, we find that all forms of the natural environment, from the skies and mountain peaks, to the watered valleys, plateau lands, and lava plains, and to the shoreline and ocean depths are believed to be *kinolau* (physical embodiments) of Hawaiian gods and deities.

Another Hawaiian genealogical account, records that *Wākea* (the expanse of the sky–the male) and *Papa-hānau-moku* (Papa, who gave birth to the islands–the female)—also called *Haumea-nui-hānau-wāwā* (Great Haumea, born time and time again)—and various gods and creative forces of nature, gave birth to the islands. Hawai'i, the largest of the islands, was the first-born of these island children. This birth of the islands is commemorated in various *mele ko'ihonua*, chants describing the forming of the earth. On such *mele* includes the following lines:

'O Wākea Kahikoluamea ea,
'O Papa, Papa-nui-hānau-moku ka wahine;
Hānau o Kahiki-kū, Kahiki-moe
Hānau ke 'āpapanu'u,
Hānau ke 'āpapalani,
Hānau Hawai'i i ka moku makahiapo,

Ke keiki makahiapo a lāua...

Wākea the son of Kahikoluamea, Papa, Papa-nui-hānau-moku the wife Kahiki-kū and Kahiki-moe were born The upper stratum was born, The uppermost stratum was born, Hawai'i was born, the first-born of the islands, The first born child of the two... (S.M. Kamakau 1991:126) As the Hawaiian genealogical account continues, we find that these same god-beings, or creative forces of nature who gave birth to the islands, were also the parents of the first man (Hāloa), and from this ancestor all Hawaiian people are descended (cf. David Malo, 1951; Beckwith, 1951 &1970; Pukui and Korn, 1973). It was in this context of kinship, that the ancient Hawaiians addressed their environment, and it is the basis of the Hawaiian system of land use. Importantly, in these genealogical accounts, we find too, that Mauna Kea is referred to as "Ka Mauna a Kea" (Wākea's Mountain), and it is likened to the first-born of the island of Hawai'i (cf. Pukui and Korn 1973).

A *mele hānau* (birth chant) for Kauikeaouli (Kamehameha III), who was born in 1814, describes the chiefly lineage in the context of creation and genealogy spanning—the heavens; placing the sun above; the spirit realms and physical earth—land and ocean forms; the birth of the island of Hawai'i; and subsequent birth of Mauna Kea, as the son of Wākea. Excerpts from the *mele*, published in several issues of the *Nupepa Kuokoa*, in 1866, follow below:

Nupepa Kuokoa March 24, 1866:4

No Kalani "Kauikeaouli Kamehameha III."

O hanau ka po ia luna, Hanau ka po i luna nei, O lani hanee ka po o pinai ke ewe,

O pipili ka po o moe anaana le'a, O kohi ana le'a ka po o Mahinale'a,

O huli e ka po o kaawale ka pili,

O ke keiki po lani keia a "Kea," i hanau,

Keiki akahi a ka po keiki alua a ka po,

Keiki akolu a ka po,
O ke kuakoko o ka po,
E hanau mai auanei ka po,
Oia hoi, o ka Po, hanau ka po,
O ka po la hoi auanei ko luna nei la,
Owai la hoi auanei ko lalo?

Na Aua.

O hanau ka Moku a kupu, A lau, a loa, a ao, a muo a liko.

Ka moku ia luna o Hawaii. O Hawaii nei no ka moku. He pulewa ka aina he naka Hawaii, E lewa wale ana no i ka lani lewa. Hanoa mai e Wakea pa hano ia.

Malia ikea ka moku me ka honua, Paa ia Lewaalani i ka lima akau o Wakea.

Paa Hawaii, a laa Hawaii la ikea he moku.

O ka moku la hoi auanei kolalo nei la.

For the Chief,

"Kauikeaouli Kamehameha III." Born was the night above, Born was the night up here.

The heavens slid away into the night, swift came the afterbirth.

The nights came closer together, stretching along until came a separation Making distinct the night of Mahinale'a The night turned, closeness became

separated.

This is the royal offspring of night borne by Kea.

First child of the night, second child of the night,

Third child of the night.
The night lay in travail,
To give birth to the night.
He is in the night, the night newly born,
So it is the night that is there above,
Who then is below?

By Aua.

Born was the island, it grew,
And sprouted, it flourished, rooted
deeply, budded, formed tender leaves.
That was the island over Hawaii.
Hawaii itself was an island.
The land was unstable, Hawaii quivered,
Moving freely about in space.
Wakea recognized the island, recognized,
it remained.
Visible were island and earth,

Visible were island and earth, Held in heavenly space by the right hand of Wakea.

Hawaii was held, Hawaii was seen, an island.

Down here shall be the island,

Owai la hoi auanei ko luna, owai la? O ke Ao! Aia. aia hoi ha.

Na Hauna.

O hanau ke Ao, o hiki ae. O ohi ae ke ao o hiki ae O mokupawa ke ao o hiki ae,

O aka ula ke ao o hiki ae,

O moakaka ku ke ao mala'e.

O opukupuku ke ao melemele, O memele ka opua he la-i,

O opua nui, uli ka opua hiwahiwa, O hiwahiwa ka opua lani ele, Eleele ka lani huhulu weo, Lani ekaeka ha eleele.

Hakona, hakuma, hakumakuma.
O ke ao nui mai hee ua keia,
E hoowiliwili mai ana e hanau,
Oia hoi, o ke Ao, hanau ke ao,
O ke ao la hoi auanei ko luna nei la,
Owai la auanei ko lalo la?
Owai la, o ka Mauna aia, aia hoi ha.

Na Piopio.

O hanau ka mauna a Kea,
Opuu ae ka mauna a Kea.
O Wakea ke kane,
O Papa o Walinuu ka wahine,
Hanau Hoohoku he wahine,
Hanau Haloa he alii,
Hanau ka mauna he keiki mauna na Kea,

O ka lili o Wakea o ka hai i ka hala. O ke ku kuku laau ana me Kane, I hoouka ai i iloko o Kahikiku, Hee Wakea kalewa kona ohua,

Kuamu ia e Kane, kuawa ia e Kane,

Hoi mai Wakea a loko o lani momo-e, Moe Wakea moe ia Papa, Hanau ka la na Wakea, He keiki kapu na Wakea, O ka uluna o Wakea na Kea no, Hanau ka mauna he makahiapo kapu na Kea. Who shall be above, who? The cloud! That is who is shall be.

By Hauna.

The cloud was born, it rose and appeared. The cloud thrived, it rose and appeared. The cloud came at dawn, it rose and appeared.

The cloud flushed with a reddish tinge, it rose and appeared.

The cloud rose and appeared in clearest configuration.

Turned yellow and menacing.

The horizon cloud hung yellow over a calm sea.

A swelling cloud, a dark cloud, A cloud whose deepening darkness Turned to black, a sky already black In with feathery clouds of dusk, A sky heavy with blackness, rough, lowering,

A sky speaking in threat.

A vast cloud foretelling the approach of rain. The sky writhed in labor to give birth. He is the Cloud. Thus the cloud was born. A cloud shall be up there.
Who shall be below?

Who, it shall be the Mountain there indeed.

By Piopio.

Born of Kea was the mountain (mauna). The mauna of Kea budded forth. Wakea was the husband, Papa Walinuu was the wife. Born was Hoohoku, a daughter, Born was Haloa, a chief, Born was the mountain, a mountain-son of Kea.

Jealous was Wakea, he revealed his fault, Told of his smiting Kane with a club, In battle, fought at Kahikiku.

Wakea was routed, fled in confusion with his family.

None spoke to Wakea save in whispers, but Kane shouted.

Wakea returned to the sky seeking a wife. Wakea mated with Papa,

The sun was born to Wakea, A sacred off-shoot of Wakea,

The growth of Wakea was Wakea's own. The mountain was born, the sacred first-born of Kea.

Oia hoi ha, o ka mauna. Hanau ka mauna,

O ka mauna auanei ko lalo nei la, Owai la auanei ko luna la? Owai la? O ka la, aia, aia hoi ha.

Na Hehena.

So it is, the mountain. The mountain was born.
The mountain shall be down here.

The mountain shall be down here Who shall be above?

Who? The sun. that is who it is.

By Hehena. [cf. Pukui and Korn 1973:13-28]

Through such narratives as those above, we begin to perceive that in the traditional-cultural context, natural resources—such as the stars in the heavens, the *pu'u* (hills) and rock outcrops, a pool of water, the *mea kolokolo* (insects), the *hau* (snow and dew), a forest grove, the *moa uakea a Kāne* and *lilinoe* (white rains of *Kāne* and thick mists of *Lilinoe*), an ocean current, a mountain, and even the sunrise-tinted snows of Mauna Kea (Kūkahau'ula)—are valued as cultural properties by the Hawaiian people. It is this "cultural attachment" to the natural world and heavens above that defines and shapes the beliefs, traditional cultural properties, and cultural practices of Hawaiians.

Nā Wao-Traditional Regions and Elevational Zones on the Mountain Lands

Several early descriptions of the lands of Humu'ula and Ka'ohe, describe them as sharing the summit region of Mauna Kea (see Wiltse, Register Map No. 668, and Boundary Commission testimonies in this study). While final settlement of the boundaries of Humu'ula and Ka'ohe, in 1891, took Humu'ula down to around the 9,300 foot elevation, the land rests on Mauna Kea, and with Ka'ohe, extends to the summit of Mauna Loa. They are among the largest *ahupua'a* in the Hawaiian Islands.

In any discussion of Hawaiian land—'āina, that which sustains the people—and its place in culture, it is also appropriate to briefly discuss traditional Hawaiian land terms, as the terms demonstrate an intimate knowledge of the environment about them. We observe once again, that in the Hawaiian mind, all aspects of natural and cultural resources are interrelated. All are culturally significant. Thus, when speaking of Mauna Kea—the first born child of Hawai'i, abode of the gods—it's integrity and sense of place depends on the well-being of the whole entity, not only a part of it.

As introduced in the above narratives, and further recorded throughout this study in native testimonies and historical accounts, readers are provided with documentation of the detailed knowledge that Hawaiians had of the 'āina mauna. Native accounts and other historical writings record that the vast regional land divisions of Humu'ula and Ka'ohe, and the smaller ahupua'a and 'ili which adjoin them on the lower mountain slopes, included a wide range of named environmental zones (wao). Each of these wao were noted for resources—extending from the sea to the forested lands, and in some instances, to the summits of the two mountains. It was these resources that sustained Hawaiian life, culture and spirituality.

Hawaiian customs and practices demonstrate the belief that all portions of the land and environment are related. Indeed, just as place names tell us that areas are of cultural importance, so too, the occurrence of a Hawaiian nomenclature for the *wao* tells us that there was an intimate relationship between Hawaiians and their environment. Writing in 1869, in his history of Hawai'i, Samuel Kamakau described the various regions and divisions of land. Of the mountains Kamakau observed:

...Here are some other divisions of the islands, together with their descriptive names.

Heights in the center or toward the side of a land, or island, are called *mauna*, mountains, or *kuahiwi*, "ridge backs." The highest places, which cover over with fog and have great "flanks" behind and in front (*kaha kua, kaha alo*)—like *Mauna Kea*—are called *mauna*; the place below the summit, above where the forests grow is the *kuahiwi*. The peak of the mountain is called *pane po'o* or *piko*; if there is a sharp point on the peak it is called *pu'u*

pane po'o; if there is no hill, pu'u, and the peak of the mountain spreads out like the roof of a house, the mountain is described as a kauhuhu mauna (house ridgepole mountain); and if there is a precipitous descent, kaolo [from the peak] to the kauhuhu mauna below this is called a kualo ("block"). If there are deep ravines ('alu ha'aha'a) in the sides of the mountain it is called a kihi po'ohiwi mauna ("shoulder edge" mountain). A place that slopes down gradually (hamo iho ana) is called a ho'oku'u (a "letting down"); a sheer place is called a pali lele koa'e (cliff where koa'e birds soar), or a holo ("slide"), or a waihi (a "flowing down"). Rounded ridges that extend from the mountains or "ridge backs" or hills are called lapa or kualapa or mo'o—and, if they are large, 'olapalapa or 'omo'omo'o. Depressions between lapa or mo'o are awawa, valleys.

MOUNTAIN ZONES

Here are some names for [the zones of] the mountains—the mauna or kuahiwi. A mountain is called a kuahiwi, but mauna is the overall term for the whole mountain, and there are many names applied to one, according to its delineations ('ano). The part directly in back and in front of the summit proper is called the kuamauna, mountaintop; below the kuamauna is the kuahea, and makai of the kuahea is the kuahiwi proper. This is where small trees begin to grow; it is the wao nahele. Makai of this region the trees are tall, and this is the wao lipo. Makai of the wao lipo is the wao 'eiwa, and makai of that the wao ma'ukele. Makai of the wao ma'ukele is the wao akua, and makai of there the wao kanaka, the area that people cultivate. Makai of the wao kanaka is the 'ama'u, fern belt, and makai of the 'ama'u the 'apa'a, grasslands.

A solitary group of trees is a *moku la'au* (a "stand" of trees) or an *ulu la'au*, grove. Thickets that extend to the *kuahiwi* are *ulunahele*, wild growth. An area where *koa* trees suitable for canoes (*koa wa'a*) grow is a *wao koa* and *mauka* of there is a *wao la'au*, timber land. These are dry forest growths from the *'apa'a* up to the *kuahiwi*. The places that are "spongy" (*naele*) are found in the *wao ma'ukele*, the wet forest.

Makai of the 'apa'a are the pahe'e [pili grass] and 'ilima growths and makai of them the kula, open country, and the 'apoho hollows near to the habitations of men. Then comes the kahakai, coast, the kahaone, sandy beach, and the kalawa, the curve of the seashore—right down to the 'ae kai, the water's edge.

That is the way *ka po'e kahiko* named the land from mountain peak to sea. [S.M. Kamakau (in *Ke Au Okoa*, November 4-11, 1869; Kamakau, 1976:8-9]

The native tradition of Ka-Miki, penned by native historians, John Wise, Isaac Kihe and a group of their associates (in *Ka Hoku o Hawaii*, 1914-1917), provides readers with a detailed account of Hawaiian land divisions and environmental zones. While competing in a riddling contest at the court of the chief, Palikū-a-Kīkoʻokoʻo, the hero, Ka-Miki sparred with Pīnaʻau, the foremost riddler of the district of Hilo Palikū (northern Hilo). The riddles covered topics describing regions from the mountain tips to the depths of the ocean, and descriptions of *kalo* (taro growth), the *ala loa* (trail systems), and *nā mea lawaiʻa* (fishing practices). As the contest unfolded, it was seen that each of the competitors were well matched. In one of the riddles, Ka-Miki described the various regions of the island of Hawaiʻi, extending from the mountain to the sea. Ka-Miki then told his opponent, that if he could rise to the challenge of answering the riddle, his knowledge could be compared to one who has ascended to the summit of Mauna Kea, described as the "*mauna o Poliahu*" (mountain of Poliʻahu) (in *Ka Hoku o Hawaii*, September 21, 1916).

Through one of the riddles, readers learn about the traditional *wao* of land, districts, and land divisions of the administrators who kept peace upon the land (diacritical marks and numbers have been added to these texts to facilitate correlation between Hawaiian and English narratives). The environmental zones include:

1–Ke kuahiwi; 2–Ke kualono; 3–Ke kuamauna; 4–Ke ku(a)hea; 5–Ke kaolo; 6–Kawao; 7–Ka wao ma'u kele; 8–Ka wao kele; 9–Ka wao akua; 10–Ka wao lā'au; 11–Ka wao kānaka; 12–Ka 'ama'u; 13–Ka 'āpa'a; 14–Ka pahe'e; 15–Ke kula; 16–Ka 'ilima; 17–Ka pu'eone; 18–Ka po'ina nalu; 19–Ke kai kohola; 20–Ke kai 'ele; 21–Ke kai uli; 22–Ke kai pualena; 23–Kai pōpolohua-a-Kāne-i-Tahiti.

1–The mountain; 2–The region near the mountain top; 3–The mountain top; 4–The misty ridge; 5–The trail ways; 6–The inland regions; 7 and 8– The rain belt regions; 9– The distant area inhabited by gods; 10–The forested region; 11–The region of people below; 12–The place of 'ama'u [fern upland agricultural zone]; 13– The arid plains; 14–The place of wet land planting; 15–The plain or open country; 16–The place of 'ilima growth [a seaward, and generally arid section of the kula]; 17–The dunes; 18–The place covered by waves [shoreline]; 19–The shallow sea [shoreline reef flats]; 20–The dark sea; 21–The deep blue-green sea; 22–The yellow [sun reflecting— sea on the horizon]; and 23–The deep purplish black sea of Kāne at Tahiti. (Ka Hoku o Hawaii, September 21, 1916; Maly, translator)

The kuahiwi, kualono, kuamauna, kuahea, kaolo, kawao, wao ma'ukele, waokele, wao akua, wao lā'au, and wao kānaka, are all considered part of Mauna Kea (Figure 2). These wao extend from the mountain peaks, down slope through the wao akua—the region were the clouds settle upon the mountain lands, concealing the presence of the gods—to the lower region frequented by mankind, and from where resources were regularly collected and tended.

Ahupua'a—Nā Kuleana a me nā Pono

In the generations that followed initial settlement, the Hawaiians developed a sophisticated system of land use and resource management. By the time 'Umi-a-Līloa rose to rule the island of Hawai'i in ca. 1525, the island (*moku-puni*) was divided into six districts or *moku-o-loko* (cf. Kamakau, 1961; and Fornander 1973–Vol. II:100-102). Hilo, extending from the sea to the mountain slopes of Mauna Kea, and on to the summit of Mauna Loa—through the land division of Humu'ula—is one of those six major districts. The land division of Ka'ohe in the district of Hāmākua, another of the six major districts on the island of Hawai'i, shares a common boundary with Humu'ula, running across Mauna Kea, and up to the summit of Mauna Loa.

The large districts (*moku-o-loko*) like Hilo, and sub-regions ('*okana* and *kalana*) were further divided into manageable units of land. These smaller divisions or units of land were tended to by the *maka'āinana* (people of the land) (see Malo 1951:63-67). Of all the land divisions, perhaps the most significant management unit throughout the islands was the *ahupua'a*. *Ahupua'a* are subdivisions of land that were usually marked by an altar with an image or representation of a pig placed upon it (thus the name *ahu-pua'a* or pig-altar). In their configuration, the *ahupua'a* may be compared to wedge-shaped pieces of land that radiate out from the center of the island, extending to the ocean fisheries fronting the land unit. Their boundaries are generally defined by topography and geological features such as *pu'u* (hills), ridges, gullies, valleys, craters, or areas of a particular vegetation growth (see Boundary Commission Testimonies, 1865-1891; and C. Lyons, 1875, in this study).

The ahupua'a were also divided into smaller manageable parcels of land—such as the 'ili, kō'ele, mahina 'ai, māla, and kīhāpai—that generally run in a mauka-makai orientation, and are often marked by stone wall (boundary) alignments. In these smaller land parcels the native tenants cultivated crops necessary to sustain their families, and supplied the needs of the chiefly communities they were associated with. As long as sufficient tribute was offered and kapu (restrictions) were observed, the common people who lived in a given ahupua'a had access to most of the resources from mountain slopes to the ocean, needed to sustain life and culture. These access rights (pono) were almost uniformly tied to residency on a particular land, and earned as a result of taking responsibility (kuleana) for stewardship of the natural environment, and supplying the needs of ones' ali'i (see Malo 1951:63-67 and Kamakau 1961:372-377).



Figure 2. Nā Wao-Kuahiwi, Kualono, Kua Mauna, Kuahea o Mauna Kea (The Mountain Regions of Mauna Kea, with Waiau and the Head of Pōhakuloa Gulch in the Foreground), (National Archives and Records Administration, B-2897-11th Photo Section, January 26, 1925)

Entire ahupua'a, or portions of the land were generally under the jurisdiction of appointed Konohiki or subordinate chief-landlords, who answered to an ali'i-'ai-ahupua'a (chief who controlled the ahupua'a resources). The ali'i-'ai-ahupua'a in turn, answered to an ali'i 'ai moku (chief who claimed the abundance of the entire district). Thus, ahupua'a resources supported not only the maka'āinana and 'ohana who lived on the land, but also contributed to the support of the royal community of regional and island kingdoms. In the Hilo District, the primary chiefly center, extended from the lowlands of Pi'ihonua to the shore of Waiākea. In Hāmākua, the chiefly center was focused around Waipi'o, while in South Kohala, the center was in the Waimea section, the 'ili of Pu'ukapu and Pu'ukalani.

In 1875, Curtis J. Lyons, son of Reverend Lorenzo Lyons, of Waimea, one of the foremost surveyors of the Hawaiian Kingdom, authored a paper on "Hawaiian Land Matters" (Lyons 1875). In his discussion, he provided readers with important references to the rights of native tenants on the *ahupua'a* of Humu'ula and Ka'ohe. He also discusses their relationship with the neighboring mountain lands on the slopes of Mauna Kea:

The ordinary ahupuaa extends from half a mile to a mile into this [forest] belt. Then there are larger ahupuaas which are wider in the open country than others, and on entering the woods expand laterally so as to cut off all the smaller ones, and extend toward the mountain till they emerge to the open interior country; not however to converge to a point at the tops of the respective mountains. Only a rare few reach those elevations, sweeping

past the upper ends of all the others, and by virtue of some privilege in bird-catching, or some analogous right, taking the whole mountain to themselves... The whole main body of *Mauna Kea* belongs to one land from Hamakua, viz., *Kaohe*, to whose owners belonged the sole privilege of capturing the *ua'u*, a mountain-inhabiting but sea-fishing bird. High up on its eastern flank, however, stretched the already mentioned land of *Humuula*, whose upper limits coincide with those of the *mamane*, a valuable mountain *acasia*, and which starting from the shore near *Laupahoehoe*, extends across the upper ends of all other Hilo lands to the crater of Mokuaweoweo... [Lyons 1875:111 (emphasis added)]

Sequence of Hawaiian Settlement

Archaeologists and historians describe the inhabiting of these islands in the context of settlement which resulted from voyages taken across the open ocean. For many years archaeologists have proposed that early Polynesian settlement voyages between Kahiki (the ancestral homelands of the Hawaiian gods and people) and Hawaiii were underway by AD 300, with long distance voyages occurring fairly regularly through at least the thirteenth century. It has been generally reported that the sources of the early Hawaiian population—the Hawaiian Kahiki—were the Marquesas and Society Islands (Emory in Tatar 1982:16-18).

For generations following initial settlement, communities were clustered along the watered, windward (koʻolau) shores of the Hawaiian Islands. Along the koʻolau shores, streams flowed, rainfall was abundant, and agricultural production became established. The koʻolau region also offered sheltered bays from which deep sea fisheries could be easily accessed. Also, near-shore fisheries, enriched by nutrients carried in the fresh water running from the mountain streams, could be maintained in fishponds and coastal fisheries. It was around these bays such as at Hilo, that clusters of houses where families lived could be found (see McEldowney 1979). In these early times, the residents generally engaged in subsistence practices in the forms of agriculture and fishing (Handy, Handy and Pukui, 1972:287).

Over a period of several centuries, areas with the richest natural resources became populated and perhaps crowded, and by ca. 900 to 1100 AD, the population began expanding to the Kona (leeward side) and more remote regions of the island (Cordy 2000:130). Kirch (1979) reported that by ca. AD 1200, there were small coastal settlements at various areas along the western shore line of Hawai'i (Kirch 1979:198). In this system of settlement and residency, the near-shore communities shared extended familial relations with those of the uplands.

By the 1400s, upland regions to around the 3,000 foot elevation were being developed into areas of residence and a system of agricultural fields. By the 1500s to 1600s, residency in the uplands was becoming permanent, and there was an increasing separation of royal class from commoners. During the latter part of this period, the population stabilized and a system of land management was established as a political and socio-economic factor (see Kamakau 1961; Ellis 1963; Handy, Handy & Pukui 1972; Tomonari-Tuggle 1985; and Cordy 2000).

The lowlands of Ka'ohe, Humu'ula and the other neighboring *ahupua'a*, extending from the shore to around the 3,000 foot elevation, supported residential, agricultural, and subsistence activities, spanning the centuries of Hawaiian residency. The upper mountain lands of the Ka'ohe-Humu'ula region were frequented by travelers, collectors of natural resources, and for a wide range of cultural practices (see Kamakau, 1961; and Boundary Commission Testimonies, 1865 to 1891, in this study).

Traditions and historical records tell us that the deification and personification of the land and natural resources, and the practices of district subdividing and land use as described above, were integral to Hawaiian life, and were the product of strictly adhered to resource management planning. In this system, the people learned to live within the wealth and limitations of their natural environment, and were able to sustain themselves on the land and ocean. It is in this cultural system that we can understand the significance of the lands of Kaʻohe, Humuʻula and the neighboring *ʿāina mauna*.

Historical Overview of Land Use Practices and Travel on the 'Āina Mauna

The land of Humuʻula—extending from sea level to the 9,000 foot elevation on Mauna Kea, and above the 13,000 foot elevation on Mauna Loa—is apparently named for a type of stone (Red jasper stone) that was used in making *koʻi* (adze). The place name of Kaʻohe—a land area extending from sea level to the summits of Mauna Kea and Mauna Loa—may be literally translated as "The-bamboo" or named for a type of *kalo* (taro) that may have been common in the region (cf. Pukui, et al. 1974).

Native Hawaiian traditions and historical accounts describe the lands of Humu'ula and Ka'ohe—those areas extending from shore to around the 6,000 foot elevation—as having once been covered with dense forests, and frequented by native practitioners who gathered forest-plant resources, birds, and food. The larger 'āina mauna were frequented by individuals who were traveling to the upper regions of Mauna Kea to worship, gather stone, bury family members, or deposit the *piko* (umbilical cords of new-born children) in sacred and safe areas; and by those who were crossing from one region of the island to another.

As early as the 1820s, introduced cattle, sheep, goats, and wild dogs had made their way up to the mountain lands, and were bothersome to those who traveled the 'āina mauna. In 1834, Scottish naturalist, David Douglas was gored and killed by a wild bullock near the boundary of Humu'ula and Laupāhoehoe. By 1850, the natural-cultural landscape of the 'āina mauna was being significantly altered by the roving herds of wild bullocks, sheep and other ungulates, and ranching interests were being formalized in the region. By 1857, the Crown and Government mountain lands—including Humu'ula and Ka'ohe—were leased to Francis Spencer and the Waimea Grazing and Agricultural Company, which established ranching stations and operations around the mountain lands. As a result, the 'āina mauna have been intensively ranched for more than 150 years.

Humu'ula

Because hunting, and subsequently ranching of bullocks, cattle and sheep was the primary activity on the mountain lands of Humuʻula, areas once forested, soon became open pasture land. While the first formal lease of Humuʻula was issued in 1857 (Keoni Ana to F. Spencer), it was interests of the Parker Ranch that held the longest lease on the Humuʻula mountain lands. The lease, from 1900 to 2002, covered the area extending around Mauna Kea to the ʻĀina Hou-Puʻu Huluhulu vicinity. The Parker Ranch interests initially focused on sheep ranching in the Humuʻula-Kalai'eha section, but in 1964, the ranch terminated it's sheep program. Cattle operations were maintained until the end of the Parker lease in August, 2002.

Today, limited ranching of cattle is continued on Humu'ula, under a permit by the Department of Hawaiian Home Lands, and leases from the State of Hawaii. Also, some 6,000 acres between Pu'u 'Ō'ō and Pu'uloa, have succumb to an infestation of the introduced gorse (first recorded on the land in 1892), which has had little maintenance since ca. 1980.

Ka'ohe

Early leases of the Kaʻohe mountain lands date back to 1857 (Keoni Ana to F. Spencer), and the operations of Francis Spencer's Waimea Grazing and Agricultural Company. The lease took in all of the mountain lands, to the summit of Mauna Kea, across Kaʻohe to its Mauna Loa boundary. Activities were all tied to sheep and cattle ranching. Subsequently, in 1870, the lease was acquired by Parker Ranch, which held most of the Kaʻohe mountain lands until their removal from the lease in 1905 for the Mauna Kea Forest Reserve, and later withdrawals as a part of the Pōhakuloa Military installation in 1956 (Governor's Executive Order No. 1719; and Presidential Executive Order No. 1167). Portions of the land of Kaʻohe, generally those on the northern (Waimea) side of Mauna Kea, are still grazed by Parker Ranch. The lands of Kaʻohe V (the Pōhakuloa section), were turned over to the United States Army, and have been used for military training operations since that time.

The summit of Mauna Kea, situated in the *ahupua'a* of Ka'ohe, was noted as a site of importance for modern astronomical observations by the Pendulum Party of 1892. In 1964, the first modern observatory was built on top of Pu'u Poli'ahu. By 1968, the scientific community recognized the value of Mauna Kea as a setting for development of multiple observatories, and in 1967, the University of Hawaii Institute for Astronomy was founded. In 1968, the Board of Land and Natural Resources leased the entire summit of Mauna Kea to the Institute by Lease No. S-4191.

Na 'Āina e pili 'ana iā Mauna Kea

All other lands lying on the slopes of Mauna Kea—those belonging to the districts of Hilo, Hāmākua and Kohala—generally extended through the forests, where they are cut off by the traditional boundaries of Kaʻohe and Humuʻula. From the middle 1800s, those lands such as Waiākea, Piʻihonua, Pāpaʻikou, Laupāhoehoe, 'Oʻōkala, Kaʻala, Kūkaʻiau, Pāʻauhau, and Waikōloa, were either held in feesimple interest or leased out by the Crown and Government, for development of lumber collection, bullock hunting, cattle and sheep grazing, and in the elevations below approximately the 2,000 foot level, to development of sugar plantations.

In the early 1900s, forest lands below Humu'ula and Ka'ohe, and the Mauna Kea mountain lands from approximately the 9,000 foot elevation to the summit, were turned over to preservation in the form of forest reserves. The primary interest in the development of the reserves was the protection of water sheds to ensure that plantations would have access to water, necessary for the cultivation, harvesting, and processing of sugar. Interest in, and the value of Hawaiian forests and watersheds has since evolved as a greater awareness of the unique and fragile ecosystems of the Hawaiian mountain lands has been developed.

Na Ala Hele o ka 'Āina Mauna

Travel across the 'āina mauna is documented in native traditions, which describe ala hele (trails) passing from the coastal lowlands through the forest lands; along the edge of the forests; across the plateau lands of the Pōhakuloa-Ka'ohe region, and to the summit of Mauna Kea. These ala hele approached Mauna Kea from Hilo, Hāmākua, Kohala, Kona, and Ka'ū, five of the major districts on the island. Only Puna, which is cut off from direct access to the mountain lands, apparently did not have a direct trail to the 'āina mauna. Thus, people traveling to Mauna Kea from Puna traveled through the lands of Waiākea, Hilo or Keauhou, Ka'ū to reach Humu'ula and the slopes of Mauna Kea.

By the early 1820s, foreign visitors, in the company of native guides, began making trips across the 'āina mauna and to the summit of Mauna Kea. Based on their accounts, travel in the region through the middle 1800s basically followed the old trails, or cut across new areas—a result of dense forest growth, and new lava flows covering older routes. By the 1850s, the Kingdom of Hawai'i entered into a program of improving ancient trails and identifying new routes, by which to improve travel between various locations and facilitate commerce. The earliest recorded improvements, describing work government on a trail around Mauna Kea, document work on the Waimea-Kula'imano trail (cutting across the lands of Ka'ohe, Hāmākua and Hilo), running above the forest line and to the coast of Hilo, date from 1854, when the Waimea-Kula'imano route was improved to accommodate wagon travel.

In the later 1850s, as leases were given out for the lands of Humu'ula and Ka'ohe, and the sheep and bullock hunting interests grew, the 1854 route was maintained, and the upper trail between Kula'imano-Makahanaloa, was improved to the Kalai'eha vicinity. In 1862, the Kingdom again initiated a program to improve the government roads across the 'āina mauna. Two routes were proposed, one between Hilo and Waimea via Kalai'eha, and the second to improve on the trail from Kalai'eha towards Kula'imano-Makahanaloa, and around through Hanaipoe-Mānā and Waimea. These trails, termed Alanui Aupuni, were appropriated and work completed by the late 1860s. The routes appear on island maps through 1901, with subsequent designations as trails on later maps.

Several ancient trails approached the summit of Mauna Kea, and were used by *maka'āinana* through the 1920s. Most of these trails were accessed via the improved government roads around the

mountain. Primary approaches included, but were not limited to the Kalai'eha-Waiau Trail, the 'Umikoa-Ka'ula Trail, and the Kemole-Pu'u Nanahu Trail. Historical accounts and oral history interviews record that these trails provided travelers with access to various sites, including areas where rituals and practices were observed, and that the trails converged at Waiau. At Waiau, travelers found a sheltered area and water for their use while on the mountain. Those who were traveling to the summit of Mauna Kea, or to other locations in the summit region then followed smaller trails that provided them with the access necessary for their purposes.

By the early 1870s, the ancient trail between Kalai'eha and the summit of Mauna Kea, was improved into a horse trail by the Spencers, lessees of the Mauna Kea mountain lands. Other routes, accessing outlying ranching stations, such as at Pu'u 'Ō'ō and Puakala (Pua'ākala), Lahohinu, and Hānaipoe had also been improved by lessees, with routes running around the mountain, and down to Hilo or out to Waimea. In the leases of the Crown Lands and Government Lands, it was specified that improvements, including trails, reverted to the Crown or Government upon termination of the leases. Until the late 1940s, early 1950s, these trails and government roads were primarily used by lessees for transportation of goods—and cared for by the lessees. There are also numerous accounts by visitors to the 'āina mauna document travel in the region. By the late 1890s, the Kohala road supervisor, reported that while the mountain roads belonged to the government, they were all but private by the nature of their use.

Between the 1930s to 1940s, improvements were made to the Kalai'eha-Waipunalei section of the road to Waimea as a part of the Civilian Conservation Corps (CCC) and Territorial Forestry programs, with work also being done by the Parker Ranch. Likewise, the Kalai'eha-Waiki'i route was maintained by the ranch, and improved by the United States Army-U.S.E.D., in 1942.

Apparently little work was done on the Kalai'eha-Hilo section of the road (trail), after the 1870s. The trail was accessed by ranchers, with routes diverging to Kalai'eha and Pu'u 'Ō'ō, as described in survey records, journals, and *kama'āina* testimonies. It was also periodically used by visitors to the mountain lands, usually those who were traveling to view Mauna Loa lava flows, or to make the ascent of Mauna Kea. It was not until 1942, that the route was modified as a vehicular road in what became the Saddle Road, following in areas, the native trail and historic route, while also cutting across new lands in other locations. The "Saddle Road" was formally turned over to the Territory in 1947, following which time the general public was then given an opportunity to travel to the mountain lands unhindered.

In 1963, interest in Mauna Kea as a site for a telescope, manifested itself. Hawai'i based scientists, Walter Steiger (with the University of Hawai'i) and Howard Ellis (with the National Weather Service's Mauna Loa Weather Station) facilitated trips by Dr. Gerard Kuiper and Alika Herring (both, associated with the University of Arizona and NASA) to the summits of Mauna Loa and Mauna Kea. The Mauna Kea route basically followed the old foot trail from Kalai'eha, past Kalepeamoa, Keonehe'ehe'e, and up to the summit. Over the years, the old trail was modified for horses and pack animals, and after World War II, for the occasional four-wheel drive vehicles that ascended the mountain. In 1964, Pu'u Poli'ahu on Mauna Kea had been chosen as the site for the first telescope, and state funds were released for grading a road to Pu'u Poli'ahu, to facilitate construction and access by the scientists. Since 1964, the primary route of access up the mountain slopes has remained generally the same, though as additional development in the summit region has occurred, new accesses and realignments of the earlier route have occurred.

Historical accounts cited in various sections of this study, provide readers with detailed descriptions of the histories summarized above.

NATIVE HAWAIIAN TRADITIONS AND HISTORICAL NARRATIVES OF KA'OHE, HUMU'ULA AND THE 'ĀINA MAUNA

In Hawaiian *mo'olelo* (traditions and historical narratives) are found expressions of native beliefs, customs, practices, and history. Indeed, in Hawai'i the very landscape is storied (*wahi pana*). Each place name is associated with a tradition—names might describe the presence and interactions of the gods with people, or document events, or the characteristics of a given place. Unfortunately, today, many of those *mo'olelo* have been lost, though some still remain, and from them we are able to glimpse into the history of the lands and people of the *'āina mauna*.

This section of the study presents readers with a collection of narratives written by native Hawaiian authors and nineteenth century historians, recording history, the occurrence of events and travel, and traditions of place names, that have survived the passing of time. Several of the *mo'olelo* were translated here from the original Hawaiian by Maly; selected place names and events are emphasized by use of bold face (as in place names), and by italics. The accounts date back to the period of antiquity to the first hand accounts of those who traveled the 'āina mauna in historic times, and were found in accounts written between 1794 to 1940. The narratives are presented in four sections — I. *Mo'olelo 'Āina*: Native Traditions of the Land; II. *Ka 'Oihana Kilokilo Hōkū*: Native Knowledge of the Stars and Navigation; III. Historical Accounts of the 'Āina Mauna Recorded by Visitors and Foreign Residents (1778-1899); and IV. Historical Accounts of the 'Āina Mauna Recorded After 1900.

I. Moʻolelo ʻĀina: Native Traditions of the Land

Among the most significant sources of native *moʻolelo* are the Hawaiian language newspapers which were printed between 1838 to 1948, and the early writings of foreign visitors and residents. Most of the accounts that were submitted to the papers were penned by native residents of areas being described and noted native historians. Over the last 30 years, the author has reviewed and compiled an extensive index of articles published in the Hawaiian language newspapers, with particular emphasis on those narratives pertaining to lands, customs, and traditions. Several traditions naming places on Humuʻula, Kaʻohe, and the neighboring mountain lands, have been located in these early writings. Those accounts describe native practices, the nature of land use at specific locations, and native lore. Thus, we are given a means of understanding how people related to their environment and sustained themselves on the land.

Kai-a-ka-Hinalii:

An Account of the Ocean Flood of Ka-Hina-Li'i and Mauna Kea

In 1823, British missionary William Ellis, documented the earliest penned tradition of Mauna Kea (Mouna-Kea). Following a sermon in Hilo, in which Ellis had mentioned the biblical account of the Great Flood and Noah's Ark, several Hawaiians approached him with questions and recalled a tradition of Mauna Kea that they had learned. Ellis reported that the natives were:

...informed by their fathers, that all the land had once been overflowed by the sea, except a small peak on the top of Mouna-Kea, where two human beings were preserved from the destruction that overtook the rest, but they said they had never before heard of a ship, or of Noah, having always been accustomed to call it the kai a Kahinarii (sea of Kahinarii)... (Ellis 1963:321).

Adze Quarries, a Wooden Image, and Artifacts Found Near the Summit of Mauna Kea (1862)

The *Pacific Commercial Advertiser* of Honolulu, reported on October 23, 1862, that Dr. William Hillebrand, who was the director of the Queen's Hospital and personal physician to the royal family.

Hillebrand, who also was an avid botanist, traveled around the Hawaiian Islands collecting plant specimens. In October 1862, he conducted a tour of the island of Hawai'i, which also included a trip to the summit of Mauna Kea. The article is of particular importance as it described the adze quarries; the presence of cultural remains, documenting extensive visitation to the summit region of Mauna Kea by ancient Hawaiians; and that he found a carved wooden image at the front of a cave in an adze quarry workshop. We also learn that artifactual materials were removed from the cave including the wooden image by Dr. Hillebrand.

Under the "Notes of the Week," the Pacific Commercial Advertiser reported:

Hawaiian Antiquities. — On a a recent tour around Hawaii, Dr. Wm. Hillebrand ascended to the summit of Mauna Kea, in company with Charles Hall and Capt. Cumings. About 1500 feet below the top, on a side of the mountain seldom visited by either foreigners or natives, they discovered an ancient manufactory of stone implements. It consists of a cave, in front of which was a pile of stone chips 25 feet high, which had evidently accumulated from the manufacture of stone adzes, *maika* balls, &c. &c., which lay scattered about in an unfinished state. In front of the cave was found a wooden idol, in good preservation, which with the pedestal attached to it, measures nearly five feet high. In form the image very much resembles that picture in Jarves' History, page 27. Bones of pigs and dogs, *kapa*, pieces of cocoa-nut shells, fragments of hewn wooden implements, sea shells, and many other curiosities were also found. The Party loaded their guide and themselves with as many of these curiosities as they could carry, and returned to Waimea. On reaching Rev. Mr. Lyons' residence, the discovery soon became noised abroad among the natives, who flocked to the mission premises to learn the truth of the report.

On inquiry among them, no person appears ever to have heard of the existence of the manufactory, — even the oldest natives were ignorant of it. From this it is inferred that its antiquity must date back beyond the present generation. On reaching Kona, Dr. H. learned from Capt. Cumings that an old native was living there, who in his younger days had heard the place spoken of by his fathers, but nothing definite can be learned regarding it. The discovery forms an interesting incident in Hawaiian History, and may lead to further searches and perhaps discoveries regarding the ancient customs of this people. [Pacific Commercial Advertiser, October 23, 1862:2]

While the above article implies that almost no one knew of the adze quarries, native witnesses, hailing from the Humu'ula region, testified before the Boundary Commission in 1873, that they had traveled to the quarries, and that their elders had previously worked in the quarries (see testimonies of the Boundary Commission in this study).

Two days later, on October 25th, the native language newspaper *Kuokoa* carried news of Hillebrand's "discovery" to readers in it's columns, reporting:

KOENA O KA WA KAHIKO. Eia Kauka Hilebarana (Hillebrand) i hele aku nei i ke Kaapuni ma ka mokupuni o Hawaii, ua loaa ia ia ma Maunakea, he kii o ka wa kahiko, a me kekahi paila pahoa e waiho ana mawaho iho o ka waha o kekahi ana. He elima kapuai ka loihi o ua kii'la. He nui no paha na mea o ia ano e waiho huna mai nei iloko o ko kakou mau awaawa uliuli a me na kuahiwi no hoi a pau.

REMNANT OF ANCIENT TIMES. Doctor Hillebrand went around the island of Hawaii, and on **Maunakea** he obtained an image of ancient times, and a large pile of adzes situated outside the mouth of a cave. The image is five feet long. There are perhaps many things of this kind hidden in our green valleys and all the mountains. [Kuokoa, October 25, 1862; Maly, translator]

W.D. Alexander (1892, in this study) reported that in 1892, the carved wooden image was still in the possession of his family.

"Ka Moolelo o Laieikawai"

One of the earliest *moʻolelo* which provides us with references to Humuʻula, Mauna Kea and neighboring lands, and associates the names of places on Mauna Kea with the goddesses of the mountain, is "*Ka Moolelo o Laieikawai*" (The Tradition of Laieikawai). This tradition spans the Hawaiian Island group, and was collected by native historian, S.N. Haleole. While introducing the series, Haleole noted that he originally wrote out the tradition in 1844 (Haleole, November 29, 1862). It was published as a serial in the Hawaiian language newspaper, *Kuokoa*, between November 29, 1862 to April 11, 1863. In 1919, Martha Beckwith published Haleole's, account, titled "The Hawaiian Romance of Laieikawai by S.N. Haleole."

In Beckwith's translation, Poli'ahu is referred to as the "goddess of the snow covered mountain," Mauna Kea. Below, is a synopsis of the account, by Beckwith, focusing on the main characters of the tradition, and their association with Mauna Kea:

The young chief [Aiwohikupua] of Kaua'i when he goes to seek the beauty of Puna makes a vow to enjoy no other woman until he has won Laieikawai. At Hana on Maui, he is attracted by the lovely Hina-i-ka-malama as she rides the famous surf at Puhele, and he turns in at Haneoo. The chiefess falls in love with the handsome stranger and wins him at a game of *konane* (Hawaiian checkers). He excuses himself until his return and goes on to Hawaii, where he courts an even more beautiful chiefess in the person of Poliahu, who also promises him her hand. When he finally loses hope of winning Laie-i-ka-wai, he "claps his hands before his god" to free himself from his rash vow and proceeds to a marriage with *Poliahu*, whom he fetches home with a great cortege to Kauai. While the festivities are proceeding at Mana, the disappointed Hina, apprised of her lover's duplicity, appears and claims the forfeited stake. Aiwohikupua is obliged to relinquish himself to her embraces, but the angry *Poliahu* envelopes the lovers in alternate waves of unendurable heat and cold until they are obliged to separate, when the mountain goddess retires to her home attended by her three maidens, *Lilinoe*, *Waiaie* [sic⁶], and *Kahoupokane*, and Aiwohikupua finds himself bereft of both ladies... [Beckwith 1970:222].

Excerpts of the native texts from Haleole's publication in *Kuokoa* are cited below, with translation by Maly. We focus here on excerpts that mention Humu'ula and specific locations on the upper slopes of Mauna Kea (sites today identified as being in the *ahupua'a* of Ka'ohe):

Mokuna VII (Dekemaba 27, 1862)

Ia Aiwohikupua ma i haalele ai ia Paliuli, hoi aku la laua a hiki i Keaau, hoomakaukau na waa, a ma ia wanaao, kau maluna o na waa, a hoi i Kauai...

Ma keia holo ana mai Keaau mai, a kau i Kamaee, ma Hilopaliku, a ma kekahi la ae, haalele lakou ia laila, hiki lakou i Humuula, ma ka palena o Hilo, me Hamakua... A hala hope o Humuula ia lakou, hiki lakou mawaho pono o Kealakaha, ike mai la lakou nei i keia wahine e noho ana i ka pali kahakai, e hiamoe ana nae ke Alii ia manawa.

Chapter VII (December 27, 1862)

Aiwohikupua and his companion departed from Paliuli, and went to Keaau, where the canoe was readied in the early morning, and they boarded the canoe to return to Kauai...

While on their way from Keaau, they arrived at Kamaee, in Hilopaliku, and on the following day they departed and arrived at Humuula, on the boundary of Hilo and Hamakua... Passing Humuula, they were outside of Kealakaha, where they saw a woman sitting along the ocean cliff. The chief (Aiwohikupua) was asleep at that time.

Waiaie appears as a typesetting error in one section of Haleole's tradition, though is written as "Waiau" in another section of the account (see Chapters XVIII & XIX, below).

la lakou i ike aku ai i kela wahine, hooho ana lakou iluna o na waa, "E! ka wahine maikai hoi!"

A no keia, hikilele ae la ka hiamoe o Aiwohikupua, ninau ae la i ka lakou mea e walaau nei, haiia aku la, "He wahine maikai aia ke noho mai la i ka pali." Alawa ae la ke Alii, a ike aku la he mea e o ka wahine maikai.

A no keia mea, kauoha ae la ke Alii i na hoewaa e hoe pololei aku ma kahi a ka wahine e noho mai ana, a holo aku la a kokoke, halawai mua iho la lakou me ke kanaka e paeaea ana, ninau aku la, "Owai kela wahine e noho mai la iluna o ka pali maluna pono ou?"

Haiia mai la, "O Poliahu."

A no ka manao nui o ke Alii e ike i kela wahine, peahiia aku la, a iho koke mai la kela me kona aahukapa i hoopuniia i ka hau, a haawi mai la i kona aloha ia Aiwohikupua...

la laua e halawai malihini ana, i aku o Aiwohikupua, "E Poliahu e! E ka wahine maikai o ka pali, pomaikai wale wau ia oe ma ko kaua halawai ana iho nei, a nolaila e ke Alii wahine o ka pali nei, ke makemake nei wau e lawe oe ia'u i kane hoao nau, a e noho kanaka lawelawe aku malalo ou, ma kau mau olelo e olelo ai, a malaila wale no wau. Ina hoi e ae oe e lawe ia'u e like me ka'u e noi aku nei ia oe, alaila, e kau kaua maluna o na waa, a holo aku i Kauai, a pehea ia?"

I mai la ka wahine, "Aole wau he wahine no keia pali, no uka lilo mai wau, mai ka piko mai o kela mauna, e aahu mau ana i na kapa keokeo e like me keia kapa a'u e aahu aku nei. A pehea la i hikiwawe ai ka loaa ana o ko'u inoa ia oe e ke Alii?"

Olelo aku la o Aiwohikupua, "Akahi no wau a maopopo no Maunakea mai oe, a ua loaa koke kou inoa ia makou ma ka haiia ana e kela kanaka paeaea."

"A no kau noi e ke Alii," wahi a Poliahu, "E lawe wau ia oe i kane na'u, a nolaila, ke hai aku nei wau ia oe. me ka ninau aku: aole anei

Seeing the woman, they called out from the canoe, "Oh! What a beautiful woman!"

Because of this, the sleep quickly departed from Aiwohikupua, and he asked what was this that they were talking about, they said, "There is a beautiful woman there, sitting on the cliffs." The Chief looked, and he saw indeed that there was a beautiful woman there.

Because of this, the Chief ordered the canoe paddlers to paddle straight to the place where the woman was sitting. Arriving there shortly, they met with a man who was pole fishing, and asked, "Who is that woman sitting there atop the cliff above your?"

He answered, "It is Poliahu."

Great was the Chiefs desire to see this woman, he waved, and she quickly surrounded herself with her snow garment, and then extended her *aloha* to Aiwohikupua...

Meeting as strangers, Aiwohikupua spoke, "Say Poliahu! The beautiful woman of the cliff, I am indeed blessed by you, at our meeting here. So you, Chiefess of these cliffs here, I desire that you would take me as your husband, as one who will live as a person below you. If you will speak the words, there I will be. If you agree to take me as I have asked you, then we two shall board the canoe, and travel to Kauai. How would that be?"

The woman responded, "I am not a woman of these cliffs, I come form the distant uplands, from the summit of that mountain, always adorned in the white garment, just as I am wearing now. And how is it that you come to have my name, o Chief?"

Aiwohikupua then said, "I only now, understand that you are from *Maunakea*, but I got your name from the man that is fishing there.

"And regarding your request, o Chief," Poliahu said, "I will consider taking you as my husband. But, I say this of your request; are

o oe ke Alii i ku iluna a hoohiki ma ka inoa o kou mau Akua, aole oe e lawe i hookahi wahine o keia mau mokupuni, mai Hawaii nei, a Kauai; aia kau wahine lawe noloko mai o Moaulanuiakea? Aole anei oe i hoopalau me Hinaikamalama, ke kaikamahine Alii kaulana o Hana? A pau ko huakai kaapuni ia Hawaii nei, alaila, hoi aku a hoao olua? A no kau noi mai e lawe kaua ia kaua i mau mea hoohui nolaila, ke hai aku nei wau ia oe; aia a hoopau oe i kau hoohiki mua, alaila, aole na'u e lawe ia oe, nau no e lawe ia'u a hui kaua e like me kou makemake."

A no keia olelo a Poliahu, pili pu iho la ko Aiwohikupua manao me ke kaumaha no hoi; a liuliu hoopuka aku la o Aiwohikupua i wahi ninau pokole penei, "Pehea la oe i ike ai, a i lohe ai hoi no ka'u mau hana au e hai mai nei? He oiaio, e Poliahu e, o na mea a pau au e olelo mai nei, ua hana wau e like me ia nolaila, e hai mai i ka mea nana i olelo aku ia oe."

"Aole o'u mea nana i hai mai i keia mau mea, e ke Alii kane, no'u iho no ko'u ike," wahi a ke Alii wahine, "no ka mea, ua hanau kupuaia mai wau e like me oe, a ua loaa no ia'u ka ike mai ke Akua mai o ko'u mau kupuna a hooili ia'u, e like me oe, a na ia Akua wau i kuhikuhi mai e like me ka'u e olelo nei ia oukou. Ia oukou no e holo mai ana i Humuula, ua ike wau nou na waa, a pela wau i ike ai ia oe."

A no keia olelo, kukuli iho la o Aiwohikupua, a hoomaikai aku la imua o Poliahu, me ke noi aku e lilo ia i kane hoopalau na Poliahu, me ke noi aku a holo pu i Kauai... you not the Chief who stood and made an oath in the name of your Gods, that you would not take a wife, from Hawaii to Kauai; for your wife is to be taken from Moaulanuiakea? Yet, are you not betrothed to Hinaikamalama, the famous young chiefess of Hana? And when your journey around Hawaii was completed, that you would return and you two would be married? Now that you have asked that the two of us be joined together, I tell you that you must end your previous oath, or else I cannot take you; if you do, then you may have me as you desire."

Because of these words of Poliahu, Aiwohikupua's thoughts were saddened; Aiwohikupua then asked, "How do you know, how have your heard of my tasks, as you have stated? Poliahu, it is true, all the things that you have said, I have done as you've described. So tell who told you these things."

"No one has told me these things, o Chief, it is known to me by my own knowledge," the Chiefess said. "Because I, like you am of a wondrous birth, and I have the knowledge from the Gods, from my ancestors, as inherited by me, like you. These Gods have directed me in my words to you. When you traveled to Humuula, I saw your canoes, and thus, I saw you."

Because of these words, Aiwohikupua, kneeled down, and praised Poliahu, asking her to take him as the promised one of Poliahu, and also asked that she travel with him to Kauai... [Maly, translator]

The narratives continue, telling readers that Poli'ahu stated that she would only travel with 'Aiwohikūpua and his companions as far as Kohala. She then told him that if she was to agree to a betrothal, he must first be released from his previous engagement to Hina-i-ka-mālama.

Upon preparing for his departure from Kohala, Poli'ahu gave 'Aiwohikūpua her "kapa hau" (snow mantle), describing its sacred nature. The following events are described in the narratives below:

...Ia lakou ma Kohala, a hiki i ka la i haalele ai o Aiwohikupua ma ia Kohala, lawe ae la o Poliahu i kona kapa hau, a haawi aku la ia Aiwohikupua me ka olelo aku, "O kuu kapa hau, he kapa i papa loaia e ko'u mau makua, aole e lilo i kekahi mea e ae. ia'u wale iho no: Arriving at Kohala, the day for Aiwohikupua's departure arrived, *Poliahu* took her snow mantle and gave it to Aiwohikupua, saying, "This is my *kapa hau* (snow mantle), it is a mantle that is very sacred to my parents, not to be given carelessly to any other, only for

aka, no ko kaua lawe ana ia kaua i kane hoao oe na'u, a pela hoi wau ia oe, nolaila, he haawi lilo aku nei wau i keia kapa, a hiki i kou la e manao mai ai ia'u a loaa, iluna o Maunakea, alaila, hoike ae oe ia'u, alaila, hui kino kaua..."

...la manawa, kii aku la o Aiwohikupua i kona Ahuula, lawe mai la a hoouhi aku la ia Poliahu, me ka olelo aku, "E like me kau olelo ia'u mamua o kou haawi ana mai ia'u i ke kapa hau, pela no oe e malama ai a hiki i ko kaua hui ana e like me ke kauoha."

A pau ka laua kamailio ana i ka wanaao, hookaawale lakou i ka wahine noho mauna, a holo aku la a hiki i Hana, a halawai me Hinaikamalama... me. But because you are to be my husband, I thus give it to you, until the day that you think of me and take me, there atop *Maunakea*, then you will know me, and we two shall join together..."

At that time, Aiwohikupua took his Feather Cloak, and placed it upon Poliahu, saying, "As you have told me, when you gave me your snow mantle, so too shall you keep this until we two are joined together as instructed."

It was as the early light of dawn appeared, that they finished their conversation. They then departed from the woman who dwells upon the mountain, sailing to Hana, to meet with Hinaikamalama... [Maly, translator]

'Aiwohikūpua then returned to Kaua'i, though he failed to formally break off his betrothal to Hina-i-kamālama. After some time, 'Aiwohikūpua sent his messenger to Hawai'i to arrange for Poli'ahu to meet with him in preparation for their marriage.

At this point, Haleole introduced readers to Lilinoe, Waiau (a type setting error by the newspaper in this issue gave the name as Waiaie), and Kahoupokane, the companion-goddesses of Poli'ahu, who dwelled upon the mountains; and places for which names are still known on the mountain landscape today.

The messenger, Koa'e, went to Hawai'i and met with Poli'ahu, giving her the message of 'Aiwohikūpua. Arrangements were made, and on the appointed day, 'Aiwohikūpua and his retinue, departed from Kaua'i, and traveled to Kawaihae, and then on to the designated meeting place at Wai'ula'ula (the boundary between the *ahupua'a* of Kawaihae and 'ili of 'Ōuli, Waimea):

Mokuna XVIII (lanuali 17, 1863)

...hoouna hou aku la oia ia Koae, kekahi o kana mau elele mama e like me ka olelo kauoha i na elele mua.

A hiki o Koae i o Poliahu la, halawai aku la laua, hai aku la o Koae i ke kauoha a ke Alii e like me ka mea i haiia ma na pauku hope o ka Mokuna XVII o keia Kaao; a pau na olelo a ke Alii i ka haiia, hoi aku la ko ke Alii elele, a hai aku la ma ka pololei, alaila, he mea maikai ia i kona Haku.

Noho iho la o Aiwohikupua, a i na la hope o ke kolu o ka malama; lawe ae la ke Alii i kona mau kaukaualii, a me na punahele, i na haiawahine hoi, na hoa kupono ke hele pu ma ke kahiko ana i ka hanohano Alii ke hele ma kana huakai no ka hoao o na Alii.

Chapter XVIII (January 17, 1863)

...he sent Koae, one of his swift messengers, with the command, as given to the first messenger.

Koae arrived before Poliahu, and they met. Koae told her the command of the Chief, as given in the last paragraph of Chapter XVII of this tale. When the words of the Chief had been spoken, the Royal messenger repeated the words to his Lord's satisfaction.

Aiwohikupua then sat down, and in the last days of the third month; the Chief took his royal attendants, favorites, female retainers, and those necessary companions, adorned in their Chiefly manner, and traveled to where the chief would be married.

I na la i o Kaloa kukahi, haalele o Aiwohikupua ia Kauai, holo aku oia he kanaka kaulua, elua kanaka kaukahi, he iwakalua peleleu.

Mamua o ka po hoao o na Alii, i ka po i o Huna, hiki lakou i Kawaihae, ia manawa, hoouna aku la oia ia koae, kona elele e kii ia Poliahu e iho mai e halawai me Aiwohikupua, i ka la i kauohaia'i e hoao.

A hiki ka elele imua o Aiwohikupua mai ke kii ana ia Poliahu, a hai mai la i kana olelo mai a Poliahu mai, "Eia ke kauoha a ko wahine, ma Waiulaula olua e hoao ai, ina e ike aku kakou ma ke kakahiaka nui o ka la o Kulu, e halii ana ka hau mai ka piko o Maunakea, Maunaloa, a me Hualalai, a hiki i Waiulaula, alaila, ua hiki lakou i kahi o olua e hoao ai, alaila, hele aku kakou, pela mai nei."

Alaila, hoomakaukau ae la o Aiwohikupua i kona hanohano Alii.

Kahiko aku la o Aiwohikupua i kona mau kaukaualii kane, a me na kaukaualii wahine, a me na punahele, i ka Ahuula, a o na haiawahine kekahi i kahikoia i ka Ahuoeno. A kahiko iho la o Aiwohikupua i kona kapa hau a Poliahu i haawi aku ai, kau iho la i ka mahiole ie i hakuia i ka hulu o na liwi. Kahiko aku la oia i kona mau hoewaa o ke Alii, pela no na hoewaa o kona puali alii a pau...

Ma ka la o Kulu, ma ke kakahiaka, i ka puka ana ae o ka la a kiekie iki ae, ike aku la o Aiwohikupua ma i ka hoomaka ana o ka hau e uhi maluna o ka piko o na mauna, a hiki i kahi o laua e hoao ai.

I kela manawa, ua hiki o Poliahu, Lilinoe, Waiaie [Waiau], a me Kahoupokane, i kahi e hoao ai na Alii.

Ia manawa, hoomaka o Aiwohikupua e hele e hui me ka wahine noho mauna o Maunakea. E like me ka mea i oleloia maluna, pela ko ke Alii hele ana.

la Aiwohikupua ma e holo aku ana i ka moana mai Kawaihae aku. he mea e ka olioli On the day of *Kaloa kukahi*, Aiwohikupua departed from Kauai with his people on double and single-hulled canoes, and twenty *peleleu* canoes.

Before the night of the Royal wedding, on the night of Huna, they arrived at Kawaihae, he [Aiwohikupua] then sent his messenger, Koae, to fetch Poliahu, bringing her down to meet with Aiwohikupua, on the day set for the wedding.

Returning from his trip to get Poliahu, the messenger went in front of Aiwohikupua, and gave him the message that Poliahu had given him, "Here is the command of your woman; at Waiulaula you two will be wed. When, in the early morning of Kulu we see that the snows have spread from the summit of *Maunakea*, to Maunaloa, and Hualalai, and are descending to Waiulaula, we are to go, for there is the place where you two will wed."

So Aiwohikupua prepared in his Royal honor.

Aiwohikupua adorned his supporting chiefs and chiefesses, and his favorites in Feather cloaks; his female attendants were adorned in fine woven garments (ahu'o'eno). And Aiwohikupua was adorned in the snow mantle, which *Poliahu* had given him, and with an *ie* helmet, covered with the feathers of the *iiwi* birds. He also adorned all of his Royal paddlers and all of his warriors...

On the day of *Kulu*, in the early morning, as the sun was just rising, Aiwohikupua and companions saw that the snow began to cover the summits of the mountains, and then descended to the place where they two were to be married.

At that time, *Poliahu, Lilinoe, Waiaie* [*Waiau*], *and Kahoupokane* arrived at the place where the Royal couple was to be wed.

At that time, Aiwohikupua then went to join the mountain-dwelling woman of *Maunakea*. As described above, the Chief went to meet her.

Aiwohikupua and his companions traveled across the ocean from Kawaihae, and Lilinoe

o Lilinoe i ka hanohano launa ole o ke Alii kane.

A hiki lakou i Waiulaula, ua pauia lakou e ke anu, a nolaila, hoouna aku la o Aiwohikupua i kona elele e hai aku ia Poliahu, "Aole e hiki aku lakou no ke anu."

Ia manawa, haalele e Poliahu i kona kapa hau, lalau like ae la ka poe noho mauna i ko lakou kapa la, hoi aku la ka hau a kona wahi mau.

Ia Aiwohikupua ma i hiki aku ai ma ko Poliahu ma wahi e noho ana, he mea lealea loa i ke Alii wahine na mea kani o na waa o ke Alii kane, a he mea mahalo loa no hoi ia lakou ka ike ana i ko ke Alii kane hanohano, a maikai hoi.

la laua i hui ai, hoike ae la o Aiwohikupua, a me Poliahu, i na aahu o laua i haawi muaia i mau hoike no ka laua olelo ae like... rejoiced at the unequaled glory of the Chief.

When they arrived at Waiulaula, they were overtaken by the cold. Therefore, Aiwohikupua sent his messenger to tell *Poliahu*, "They could not continue because of the cold."

Poliahu then set aside her snow mantle, as did the others who dwell on the mountain, and the snows returned to their usual abode.

When Aiwohikupua and his companions arrived at the place where *Poliahu* and her companions were sitting, there was great joy between the Chiefesses, and those of the canoes of the Chief. They greatly admired the Chief in his glory.

When they met, Aiwohikupua and *Poliahu* both showed one another their garments which they had first given as a sign of their original agreement... [Maly, translator]

Poli'ahu, 'Aiwohikūpua and his party then departed for Mānā, Kaua'i, as had been agreed upon earlier. They joined the Chiefs Hauailiki and Makaweli, and entered into enjoyable contests in the lover's game of *kilu*.

In the meantime, Hina-i-ka-mālama heard of 'Aiwohikūpua's wedding to Poli'ahu, and she determined to travel to Kaua'i to claim her first right to 'Aiwohikūpua as a husband.

As described in the summary of the *moʻolelo* prepared by Martha Beckwith (1970), the promised marriage between Poliʻahu and 'Aiwohikūpua was not meant to be. Outraged, Poliʻahu abandoned 'Aiwohikūpua to Hina, but punished them by sending waves of cold and heat over them.

Mokuna XIX (lanuali 24, 1863)

...lloko o ko laua manawa i hoomaka ai no ka hooko ana i ka hoohiki, alaila, ua pono ole ia mea i ko Poliahu manao.

Ia manawa, lawe ae la o Poliahu i kona kapa la, a aahu iho la, ia manawa ka hookuu ana'ku o Poliahu i ka wela maluna o Hinaikamalama. Ia manawa, hapai ae la oia he wahi mele, penei:

> "He wela--e, he wela, Ke poi mai nei ka wela a kuu ipo ia'u, Ke hoohahana nei i kuu kino, Ke hoonakulu nei hoi i kuu manawa, No kuu ipo paha keia wela---e."

Chapter XIX (January 24, 1863)

... **Poliahu** felt sorely wronged at the time they [Aiwohikupua and Hinaikamalama] set out to fulfill their oath.

At that time, *Poliahu* took her mantle and put it on, and then she released a heat upon Hinaikamalama. At that time, she [Hinaikamalama] took up a chant, thus:

It is so hot, so hot,
The heat of my love covers me,
Warming my body,
Causing my feelings to flutter,
Perhaps the heat is from my sweetheart.